

**WEST PHOENIX POWER PLANT
PERMIT NUMBER V95-006
Permit Conditions
Minor Modifications 6-27-02-01 and 6-19-03-01
July 10, 2003, and
Significant Revision S06-007**

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In accordance with Maricopa County Air Pollution Control Rules and Regulations (Rules), Rule 210 § 302.2, all Conditions of this Permit are federally enforceable unless they are identified as being locally enforceable only. However, any Permit Condition identified as locally enforceable only will become federally enforceable if, during the term of this Permit, the underlying requirement becomes a requirement of the Clean Air Act (CAA) or any of the CAA's applicable requirements.

All federally enforceable terms and conditions of this Permit are enforceable by the Administrator of the United States Environmental Protection Agency (Administrator or Administrator of the USEPA hereafter) and citizens under the CAA.

Any cited regulatory paragraphs or section numbers refer to the version of the regulation that was in effect on the first date of public notice of the applicable Permit Condition unless specified otherwise.

GENERAL CONDITIONS:

- 1. AIR POLLUTION PROHIBITED:** [County Rule 100 §301] [SIP Rule 3]
The Permittee shall not discharge from any source whatever into the atmosphere regulated air pollutants which exceed in quantity or concentration that specified and allowed in the County or SIP Rules, the Arizona Administrative Code (AAC) or the Arizona Revised Statutes (ARS), or which cause damage to property or unreasonably interfere with the comfortable enjoyment of life or property of a substantial part of a community, or obscure visibility, or which in any way degrade the quality of the ambient air below the standards established by the Maricopa County Board of Supervisors or the Director of the Arizona Department of Environmental Quality (ADEQ).
- 2. CIRCUMVENTION:** [County Rule 100 §104] [40 CFR 60.12] [40 CFR 63.4(b)]
The Permittee shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of regulated air pollutants to the atmosphere, conceals or dilutes an emission which would otherwise constitute a violation of this Permit or any Rule or any emission limitation or standard. The Permittee shall not circumvent the requirements concerning dilution of regulated air pollutants by using more emission openings than is considered normal practice by the industry or activity in question.
- 3. CERTIFICATION OF TRUTH, ACCURACY, AND COMPLETENESS:**
[County Rule 100 §401] [County Rule 210 §§301.7, 302.1e(1), 305.1c(1) & 305.1e]
Any application form, report, or compliance certification submitted under the County Rules or these Permit Conditions shall contain certification by a responsible official of truth, accuracy, and completeness of the application form or report as of the time of submittal. This certification and any other certification required under the County Rules or these Permit Conditions shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- 4. COMPLIANCE:**
A. COMPLIANCE REQUIRED:
1) The Permittee must comply with all conditions of this permit and with all applicable requirements of Arizona air quality statutes and the air quality rules. Compliance with permit terms and conditions does not relieve, modify, or otherwise affect the Permittee's duty to comply with all applicable requirements of Arizona air quality statutes and the

Maricopa County Air Pollution Control Regulations. Any permit non-compliance is grounds for enforcement action; for a permit revocation and reissuance, or revision; or for denial of a permit renewal application. Noncompliance with any federally enforceable requirement in this Permit constitutes a violation of the Act. [This Condition is federally enforceable if the condition or requirement itself is federally enforceable and only locally enforceable if the condition or requirement itself is locally enforceable only.]

[County Rule 210 §§301.8 b4 & 302.1h(1)]

- 2) The Permittee shall halt or reduce the permitted activity in order to maintain compliance with applicable requirements of Federal laws, Arizona laws, the County Rules, or other conditions of this Permit.

[County Rule 210 §302.1h(2)]

- 3) For any major source operating in a nonattainment area for any pollutant(s) for which the source is classified as a major source, the source shall comply with reasonably available control technology (RACT) as defined in County Rule 100.

[County Rule 210 §302.1(h)(6)] [SIP Rule 220 §302.1]

Compliance with the RACT requirements of this Permit Condition for NO_x shall not be required if a waiver granted by the Administrator under Section 182 (f) of the Clean Air Act is in effect.

B. COMPLIANCE CERTIFICATION REQUIREMENTS:

[County Rule 210 §305.1d]

The Permittee shall file a semiannual compliance certification with the Control Officer and also with the Administrator of the USEPA. The report shall certify compliance with the terms and conditions contained in this Permit, including emission limitations, standards, or work practices. The certification shall be on a form supplied or approved by the Control Officer and shall include each of the following:

- 1) The identification of each term or condition of the permit that is the basis of the certification;
- 2) The compliance status;
- 3) Whether compliance was continuous or intermittent;
- 4) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- 5) Other facts as the Control Officer may require to determine the compliance status of the source.

The semiannual certification shall be filed at the same time as the semiannual monitoring report required by the Specific Condition section of these Permit Conditions.

C. COMPLIANCE PLAN:

[County Rule 210 §305.1g]

Based on the certified information contained in the application for this Permit, the facility is in compliance with all applicable requirements in effect as of the release date of the proposed conditions for this Permit. The Permittee shall continue to comply with all applicable requirements and shall meet any applicable requirements that may become effective during the term of this permit on a timely basis. [This Condition is federally enforceable if the applicable requirement itself is federally enforceable and only locally enforceable if the applicable requirement itself is locally enforceable only.]

5. CONFIDENTIALITY CLAIMS:

[County Rules 100 §402 and 200 §411]

Any records, reports or information obtained from the Permittee under the County Rules or this Permit shall be available to the public, unless the Permittee files a claim of confidentiality in accordance with ARS §49-487(c) which:

- A. precisely identifies the information in the permit(s), records, or reports which is considered confidential, and
 - B. provides sufficient supporting information to allow the Control Officer to evaluate whether such information satisfies the requirements related to trade secrets or, if applicable, how the information, if disclosed, could cause substantial harm to the person's competitive position.
- The claim of confidentiality is subject to the determination by the Control Officer as to whether the claim satisfies the claim for trade secrets.

A claim of confidentiality shall not excuse the Permittee from providing any and all information required or requested by the Control Officer and shall not be a defense for failure to provide such information.

If the Permittee submits information with an application under a claim of confidentiality pursuant to ARS 49-487 and County Rule 200, the Permittee shall submit a copy of such information directly to the Administrator of the USEPA.

[County Rule 210 §301.5]

6. CONTINGENT REQUIREMENTS:

NOTE: This Permit Condition covers activities and processes addressed by the CAA which may or may not be present at the facility. This condition is intended to meet the requirements of both Section 504(a) of the 1990 Amendments to the CAA, which requires that Title V permits contain conditions necessary to assure compliance with applicable requirements of the Act as well as the Acid Rain provisions required to be in all Title V permits.

- A. **ACID RAIN:** [County Rule 210 §§302.1b(2) & 302.1f] [County Rule 371 §301]
 - 1) Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated pursuant to Title IV of the CAA and incorporated pursuant to County Rule 371, both provisions shall be incorporated into this Permit and shall be enforceable by the Administrator.
 - 2) The Permittee shall not allow emissions exceeding any allowances that the source lawfully holds pursuant to Title IV of the CAA or the regulations promulgated thereunder and incorporated pursuant to County Rule 371.
 - a) No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program and incorporated pursuant to County Rule 371, provided that such increases do not require a permit revision pursuant to any other applicable requirement.
 - b) No limit is placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to non-compliance with any other applicable requirement.

- c) Any such allowance shall be accounted for according to the procedures established in regulations promulgated pursuant to Title IV of the CAA.
- d) All of the following prohibitions apply to any unit subject to the provisions of Title IV of the CAA and incorporated into this Permit pursuant to County Rule 371:
 - (1) Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or operators of the unit or the designated representative of the owners or operators.
 - (2) Exceedances of applicable emission rates.
 - (3) The use of any allowance prior to the year for which it was allocated.
 - (4) Violation of any other provision of the permit.

B. ASBESTOS:

[40 CFR 61, Subpart M] [County Rule 370 §301.8 - locally enforceable only]

The Permittee shall comply with the applicable requirements of Sections 61.145 through 61.147 and 61.150 of the National Emission Standard for Asbestos and County Rule 370 for all demolition and renovation projects.

C. RISK MANAGEMENT PLAN (RMP):

[40 CFR 68]

Should this stationary source, as defined in 40 CFR 68.3, be subject to the accidental release prevention regulations in Part 68, then the Permittee shall submit an RMP by the date specified in Section 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70. However, neither the RMP nor modifications to the RMP shall be considered to be a part of this Permit.

D. STRATOSPHERIC OZONE PROTECTION:

[40 CFR 82 Subparts E, F, and G]

If applicable, the Permittee shall follow the requirements of 40 CFR 82.106 through 82.124 with respect to the labeling of products using ozone depleting substances.

If applicable, the Permittee shall comply with all of the following requirements with respect to recycling and emissions reductions:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- 2) Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by a certified technician pursuant to 40 CFR 82.161.

If applicable, the Permittee shall follow the requirements of 40 CFR Subpart G, including all Appendices, with respect to the safe alternatives policy on the acceptability of substitutes for ozone-depleting compounds.

7. DUTY TO SUPPLEMENT OR CORRECT APPLICATION:

[County Rule 210 §301.6]

If the Permittee fails to submit any relevant facts or has submitted incorrect information in a permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, the Permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a proposed permit.

- 8. EMERGENCY EPISODES:** [County Rule 600 §302] [SIP Rule 72 e, f & g]
If an air pollution alert, warning, or emergency has been declared, the Permittee shall comply with any applicable requirements of County Rule 600 §302.

- 9. EMERGENCY PROVISIONS:** [County Rule 130 §§201 and 402]
An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, that requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the requirements of this Permit Condition are met.

The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- A. An emergency occurred and that the Permittee can identify the cause or causes of the emergency;
- B. At the time of the emergency, the permitted source was being properly operated;
- C. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in this permit; and
- D. The Permittee as soon as possible telephoned the Control Officer giving notice of the emergency and submitted notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirement of County Rule 210. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

This provision is in addition to any emergency or upset provision contained in any applicable requirement.

- 10. EXCESS EMISSIONS:** [County Rule 140 §§103, 401 & 402] [locally enforceable only]
- A. Exemptions: The excess emissions provisions of this Permit Condition do not apply to the following standards and limitations:
 - 1) Promulgated pursuant to Section 111 (Standards Of Performance for New Stationary Sources) of the Clean Air Act (Act) or Section 112 (National Emission Standards For Hazardous Air Pollutants) of the Act;
 - 2) Promulgated pursuant to Title IV (Acid Deposition Control) of the Act or the regulations promulgated thereunder and incorporated under Rule 371 (Acid Rain) of these rules or Title VI (Stratospheric Ozone Protection) of the Act;
 - 3) Contained in any Prevention Of Significant Deterioration (PSD) or New Source Review (NSR) permit issued by the Environmental Protection Agency (EPA);

- 4) Included in a permit to meet the requirements of Rule 240 (Permit Requirements For New Major Sources And Major Modifications To Existing Major Sources), Subsection 308.1(e) (Permit Requirements For Sources Located In Attainment And Unclassified Areas) of these rules.
- B. Affirmative Defense For Malfunctions: Emissions in excess of an applicable emission limitation due to malfunction shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to malfunction has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:
- 1) The excess emissions resulted from a sudden and unavoidable breakdown of the process equipment or the air pollution control equipment beyond the reasonable control of the operator;
 - 2) The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - 3) If repairs were required, the repairs were made in an expeditious fashion when the applicable emission limitations were being exceeded. Off-shift labor and overtime were utilized where practicable to ensure that the repairs were made as expeditiously as possible. If off-shift labor and overtime were not utilized, then the owner and/or operator satisfactorily demonstrated that such measures were impractical;
 - 4) The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable during periods of such emissions;
 - 5) All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - 6) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
 - 7) During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 that could be attributed to the emitting source;
 - 8) The excess emissions did not stem from any activity or event that could have been foreseen and avoided, or planned, and could not have been avoided by better operations and maintenance practices;
 - 9) All emissions monitoring systems were kept in operation, if at all practicable; and
 - 10) The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
- C. Affirmative Defense For Startup And Shutdown:
- 1) Except as provided in paragraph 2) below, and unless otherwise provided for in the applicable requirement, emissions in excess of an applicable emission limitation due to startup and shutdown shall constitute a violation. The owner and/or operator of a source with emissions in excess of an applicable emission limitation due to startup and shutdown has an affirmative defense to a civil or administrative enforcement proceeding based on that violation, other than a judicial action seeking injunctive relief, if the owner and/or operator of the source has complied with the excess emissions reporting requirements of these Permit Conditions and has demonstrated all of the following:

- a. The excess emissions could not have been prevented through careful and prudent planning and design;
 - b. If the excess emissions were the result of a bypass of control equipment, the bypass was unavoidable to prevent loss of life, personal injury, or severe damage to air pollution control equipment, production equipment, or other property;
 - c. The source's air pollution control equipment, process equipment, or processes were at all times maintained and operated in a manner consistent with good practice for minimizing emissions;
 - d. The amount and duration of the excess emissions (including any bypass operation) were minimized to the maximum extent practicable, during periods of such emissions;
 - e. All reasonable steps were taken to minimize the impact of the excess emissions on ambient air quality;
 - f. During the period of excess emissions, there were no exceedances of the relevant ambient air quality standards established in County Rule 510 (Air Quality Standards) that could be attributed to the emitting source;
 - g. All emissions monitoring systems were kept in operation, if at all practicable; and
 - h. The owner's and/or operator's actions in response to the excess emissions were documented by contemporaneous records.
 - 2) If excess emissions occur due to a malfunction during routine startup and shutdown, then those instances shall be treated as other malfunctions subject to paragraph A. of this Permit Condition.
 - D. Affirmative Defense For Malfunctions During Scheduled Maintenance: If excess emissions occur due to malfunction during scheduled maintenance, then those instances will be treated as other malfunctions subject to paragraph A. of this Permit Condition.
 - E. Demonstration Of Reasonable And Practicable Measures: For an affirmative defense under paragraphs A and B of this Permit Condition, the owner and/or operator of the source shall demonstrate, through submission of the data and information required by this Permit Condition and the excess emissions reporting requirements of these Permit Conditions, that all reasonable and practicable measures within the owner's and/or operator's control were implemented to prevent the occurrence of the excess emissions.
- 11. FEES:** [County Rules 200 §409; 210 §302.1i; 210 §401]
 The Permittee shall pay fees to the Control Officer pursuant to ARS 49-480(D) and County Rule 280.
- 12. MODELING:** [locally enforceable only][County Rule 200 §407]
 Where the Control Officer requires the Permittee to perform air quality impact modeling, the Permittee shall perform the modeling in a manner consistent with the "Guideline on Air Quality Models (Revised)" (EPA-450/2-78-027R, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Research Triangle Park, N.C. 27711, July 1986) and "Supplement B to the Guideline on Air Quality Models" (U.S. Environmental Protection Agency, September 1990). Both documents shall be referred to hereinafter as "Guideline", and are adopted by reference. Where the person can demonstrate that an air quality impact model specified in the guideline is inappropriate, the model may be modified or another model substituted if found to be acceptable to the Control Officer.
- 13. MONITORING / TESTING:**

- A. The Permittee shall monitor, sample, or perform other studies to quantify emissions of regulated air pollutants or levels of air pollution that may reasonably be attributable to the facility if required to do so by the Control Officer, either by Permit or by order in accordance with County Rule 200 §309.

[County Rule 200 §309] [SIP Rule 41]

- B. Except as otherwise specified in these Permit Conditions or by the Control Officer, the Permittee shall conduct required testing used to determine compliance with standards or permit conditions established pursuant to the County or SIP Rules or these Permit Conditions in accordance with County Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 §408] [County Rule 270 §§300 and 400] [SIP Rule 27]

- C. The Permittee may use equivalent test methods and procedures in lieu of those described in this paragraph if approved by the Control Officer.

[County Rule 270 §402]

- D. The Permittee shall provide, or cause to be provided, performance testing facilities as follows:

- 1) Sampling ports adequate for test methods applicable to such source.
- 2) Safe sampling platform(s).
- 3) Safe access to sampling platforms(s).
- 4) Utilities for sampling and testing equipment.

[County Rule 270 §405] [SIP Rule 42]

14. PERMITS:

- A. BASIC: [County Rule 210 §302.1 h (3)]

This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

- B. DUST CONTROL PLAN REQUIREMENTS:

- 1) The following describe the permit applications with which a Dust Control Plan must be submitted. *(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction and revegetation, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)*
 - a) If the Permittee is required to obtain an Earthmoving Permit under Regulation II (Permits And Fees) of the County Rules, then the Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any dust generating operation.
 - b) The Permittee must first submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan before commencing any routine dust generating operation.

[County Rule 310 §303.3]

- 2) A Dust Control Plan shall not be required to play on a ballfield and/or for landscape maintenance. For the purpose of this Permit Condition, landscape maintenance does not include grading, trenching, nor any other mechanized surface disturbing activities.
[County Rule 200 §305] [County Rule 310 §303.4] [SIP Rule 310 §303.4]
- 3) Any Dust Control Plan shall, at a minimum, contain all the information described in Section 304 of Rule 310.
[County Rule 310 §304] [SIP Rule 310 §304]
- 4) Compliance with this section does not effect a source's responsibility to comply with the other standards of Rule 310 and these Permit Conditions. Failure to comply with the provisions of an approved Dust Control Plan or the work practice standards contained in Rule 310 §308 is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of Rule 310 at all times. In addition, if the Permittee has an approved Dust Control Plan, the Permittee is still subject to all of the requirements of Rule 310, even if the Permittee is complying with the approved Dust Control Plan.
[County Rule 310 §303] [SIP Rule 310 §303]
- 5) The Permittee shall make revisions to any required Dust Control Plan when notified in writing by the Control Officer that implementation of the existing dust control plan allowed an exceedance of the standards established in Rule 310 §§301 or 302. The revised Dust Control Plan shall be submitted to the Control Officer within 3 working days of receiving the notice, unless such time period is extended by the Control Officer for good cause. During the time when the Dust Control Plan is being revised, the Permittee must still comply with the requirements of this Permit and Rule 310.
[County Rule 310 §305] [SIP Rule 310 §305]

C. PERMITS AND PERMIT CHANGES, AMENDMENTS AND REVISIONS:

[County Rule 200 §§301 & 308][County Rule 210 §§301.4a, b, & c, and 400]

- 1) The Permittee shall comply with the Administrative Requirements of Section 400 of County Rule 210 for all changes, amendments and revisions at the facility for any source subject to regulation under County Rule 200, shall comply with all required time frames, and shall obtain any required preapproval from the Control Officer before making changes. All applications shall be filed in the manner and form prescribed by the Control Officer. The application shall contain all the information necessary to enable the Control Officer to make the determination to grant or to deny a permit or permit revision including information listed in County Rule 200 §308 and County Rule 210 §§301 & 302.3.
- 2) The Permittee shall supply a complete copy of each application for a permit, a minor permit revision, or a significant permit revision directly to the Administrator of the USEPA. The Control Officer may require the application information to be submitted in a computer-readable format compatible with the Administrator's national database management system.
[County Rule 210 §§303.1(a), 303.2, 405.4, & 406.4]
- 3) While processing an application, the Control Officer may require the applicant to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4f]

- 4) No permit revision shall be required pursuant to any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

[County Rule 210 §302.1j]

D. POSTING:

- 1) The Permittee shall keep a complete permit clearly visible and accessible on the site where the equipment is installed.

[County Rule 200 §311] [SIP Rule 22F]

- 2) If a Dust Control Plan, as required by County Rule 310, has been approved by the Control Officer, the Permittee shall post a copy of the approved Dust Control Plan in a conspicuous location at the work site, within on-site equipment, or in an on-site vehicle, or shall otherwise keep a copy of the Dust Control Plan available on site at all times.

[County Rule 310 §401] [SIP Rule 310 §401]

E. PROHIBITION ON PERMIT MODIFICATION:

[County Rule 200 §310]

The Permittee shall not willfully deface, alter, forge, counterfeit, or falsify this permit.

F. RENEWAL:

[County Rule 210 §§ 301 & 302]

- 1) The Permittee shall submit an application for the renewal of this Permit in a timely and complete manner. For purposes of permit renewal, a timely application is one that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. A complete application shall contain all of the information required by the County Rules including Rule 200 §308 and Rule 210 §§301 & 302.3.

[County Rules 210 §§301.2(a), 301.4(a), (b), (c), (d), (h) and 302.3]

- 2) The Permittee shall file all permit applications in the manner and form prescribed by the Control Officer. To apply for a permit renewal, the Permittee shall complete the "Standard Permit Application Form" and shall supply all information, including the information required by the "Filing Instructions" as shown in Appendix B of the County Rules, which is necessary to enable the Control Officer to make the determination to grant or to deny a permit which shall contain such terms and conditions as the Control Officer deems necessary to assure a source's compliance with the requirements of the CAA, Arizona statutes and County Rules.

[County Rules 200 §§308 & 309] [County Rule 210 §301.1]

- 3) The Control Officer may require the Permittee to provide additional information and may set a reasonable deadline for a response.

[County Rule 210 §301.4(f)]

- 4) If the Permittee submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the renewal permit has been issued or denied. This protection shall cease to apply if, subsequent to the completeness

determination, the Permittee fails to submit, by the deadline specified by the Control Officer, any additional information identified as being needed to process the application.

[County Rule 200 §403.2] [County Rule 210 §§301.4f and 301.9]

G. REVISION / REOPENING / REVOCATION:

- 1) This permit shall be reopened and revised to incorporate additional applicable requirements adopted by the Administrator pursuant to the CAA that become applicable to the facility if this permit has a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this Permit is due to expire unless the original permit or any of its terms have been extended pursuant to Rule 200 §403.2.

[County Rules 200 §402.1]

Any permit revision required pursuant to this Permit Condition, 14.G.1, shall reopen the entire permit and shall comply with provisions in County Rule 200 for permit renewal (*Note: this includes a facility wide application and public comment on the entire permit*) and shall reset the five year permit term.

[County Rules 200 §402.1a(1) & 210 §302.5]

- 2) This permit shall be reopened and revised under any of the following circumstances:
 - a) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Title V permit.
 - b) The Control Officer or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - c) The Control Officer or the Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Proceedings to reopen and issue a permit under this Permit Condition, 14.G.2, shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the Permit for which cause to reopen exists.

[County Rule 200 §402.1]

- 3) This permit shall be reopened by the Control Officer and any permit shall be revised, when it is determined that standards or conditions in the permit are based on incorrect information provided by the applicant.

[County Rule 210 §407.3]

- 4) This Permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Permit revision, revocation and reissuance, or termination or of a notification of planned changes or anticipated noncompliance does not stay any Permit Condition.

[County Rule 210 §302.1h(3)]

H. REVISION PURSUANT TO A FEDERAL HAZARDOUS AIR POLLUTANT STANDARD:

If the Permittee becomes subject to a standard promulgated by the Administrator pursuant to Section 112(d) of the CAA, the Permittee shall, within 12 months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

[locally enforceable only][County Rule 210 §301.2c]

I. REQUIREMENTS FOR A PERMIT:

- 1) Air Quality Permit: Except as noted pursuant to the provisions in Sections 403 and 405 of County Rule 210, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a permit issued pursuant to County Rule 210. Permit expiration terminates the Permittee's right to operate. However, if a source submits a timely and complete application, as defined in County Rule 210 §301, for permit issuance, revision, or renewal, the source's failure to have a permit is not a violation of the County Rules until the Control Officer takes final action on the application. The Source's ability to operate without a permit as set forth in this paragraph shall be in effect from the date the application is determined to be complete until the final permit is issued. This protection shall cease to apply if, subsequent to the completeness determination, the applicant fails to submit, by the deadline specified in writing by the Control Officer, any additional information identified as being needed to process the application. If a source submits a timely and complete application for a permit renewal, but the Control Officer has failed to issue or deny the renewal permit before the end of the term of the previous permit, then the permit shall not expire until the permit renewal has been issued or denied.

[County Rule 210 §301.9]

2) Earthmoving Permit:

(NOTE: If the Permittee engages in or allows any routine dust generating activities at the facility, the Permittee shall apply to have the routine dust generating activity covered as part of this Permit. Nonroutine activities, such as construction and revegetation, require a separate Earthmoving Permit that must be obtained from the Control Officer before the activity may begin.)

No person shall commence any earth moving operation or any dust generating operation without meeting the requirements of and obtaining any and all Earth Moving Equipment Permits and Permits to Operate required by County Rule 200. The provisions of this section shall not apply:

- a) During emergency, life threatening situations or in conjunction with any officially declared disaster or state of emergency;
- b) To operations conducted by essential service utilities to provide electricity, natural gas, oil and gas transmission, cable television, telephone, water, and sewerage during service outages and emergency disruptions;
- c) To non-routine or emergency maintenance of flood control channels and water retention basins.
- d) To vehicle test and development facilities and operations when dust is required to test and validate design integrity, product quality and/or commercial acceptance. Such facilities and operations shall be exempted from the provisions of this section only if such testing is not feasible within enclosed facilities.

[County Rule 310 §302] [SIP Rule 310 §302]

The Permittee shall not cause, commence, suffer, allow, or engage in any earthmoving operation that disturbs a total surface area of 0.10 acre or more without first obtaining a permit from the Control Officer. Permits shall not be required for earthmoving operations for emergency repair of utilities, paved roads, unpaved roads, shoulders, and/or alleys.

[County Rule 200 §305]

- 3) Burn Permit: The Permittee shall obtain a Permit To Burn from the Control Officer before conducting any open outdoor fire except for the activities listed in County Rule 314 §§302.1 and 302.2.

[County Rules 314 & 200 §306] [SIP Rule 314]

- J. RIGHTS AND PRIVILEGES: [County Rule 210 §302.1 h (4)]
This Permit does not convey any property rights nor exclusive privilege of any sort.

- K. SEVERABILITY: [County Rule 210 §302.1g]
The provisions of this Permit are severable, and, if any provision of this Permit is held invalid, the remainder of this Permit shall not be affected thereby.

- L. SCOPE:
The issuance of any permit or permit revision shall not relieve the Permittee from compliance with any Federal laws, Arizona laws, or the County or SIP Rules, nor does any other law, regulation or permit relieve the Permittee from obtaining a permit or permit revision required under the County Rules.

[County Rule 200 §308] [SIP Rule 22H]

Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Act, including the authority of the Administrator pursuant to that section.
- 2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act.
- 4) The ability of the Administrator of the USEPA or of the Control Officer to obtain information from the Permittee pursuant to Section 114 of the Act, or any provision of State law.
- 5) The authority of the Control Officer to require compliance with new applicable requirements adopted after the permit is issued. [locally enforceable only]

[County Rule 210 §407.2]

- M. TERM OF PERMIT: [County Rule 210 §§302.1a & 402]
This Permit shall remain in effect for no more than 5 years from the date of issuance.

- N. TRANSFER: [County Rule 200 §404]
Except as provided in ARS 49-429 and County Rule 200, this permit may be transferred to another person if the Permittee gives notice to the Control Officer in writing at least 30 days

before the proposed transfer and complies with the permit transfer requirements of County Rule 200 and the administrative permit amendment procedures pursuant to County Rule 210.

15. RECORDKEEPING:

A. RECORDS REQUIRED:

[County Rule 100 §501] [County Rule 310 §502] [SIP Rule 40 A]

The Permittee shall maintain records of all emissions testing and monitoring, records detailing all malfunctions which may cause any applicable emission limitation to be exceeded, records detailing the implementation of approved control plans and compliance schedules, records required as a condition of any permit, records of materials used or produced and any other records relating to the emission of air contaminants which may be requested by the Control Officer.

B. RETENTION OF RECORDS:

Unless a longer time frame is specified by the Rules or these Permit Conditions, the Permittee shall retain information and records required by either the Control Officer or these Permit Conditions as well as copies of summarizing reports recorded by the Permittee and submitted to the Control Officer for 5 years after the date on which the pertinent report is submitted.

[County Rule 100 §504] [SIP Rule 40 C]

The Permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or physical records for continuous monitoring instrumentation, and copies of all reports required by the permit.

[County Rule 210 §§302.1 d (2) and 305.1 b (2)]

C. MONITORING RECORDS:

[County Rule 210 §§302.1 d (1) and 305.1 b (1)]

Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The company or entity that performed the analyses;
- 4) The analytical techniques or methods used;
- 5) The results of such analyses; and
- 6) The operating conditions as existing at the time of sampling or measurement.

D. RIGHT OF INSPECTION OF RECORDS:

[County Rule 100 §106] [SIP Rule 40 D]

When the Control Officer has reasonable cause to believe that the Permittee has violated or is in violation of any provision of County Rule 100 or any County Rule adopted under County Rule 100, or any requirement of this permit, the Control Officer may request, in writing, that the Permittee produce all existing books, records, and other documents evidencing tests, inspections, or studies which may reasonably relate to compliance or noncompliance with County Rules adopted under County Rule 100. No person shall fail nor refuse to produce all existing documents required in such written request by the Control Officer.

16. REPORTING:

NOTE: See the Permit Condition titled Certification Of Truth, Accuracy and Completeness in conjunction with reporting requirements.

- A. ANNUAL EMISSION INVENTORY REPORT: [County Rule 100 §505][SIP Rule 40 B]
Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall complete and shall submit to the Control Officer an annual emissions inventory report. The report is due by April 30 or 90 days after the Control Officer makes the inventory form(s) available, whichever occurs later.

The annual emissions inventory report shall be in the format provided by the Control Officer.

The Control Officer may require submittal of supplemental emissions inventory information forms for air contaminants under Arizona Revised Statutes (ARS) §49-476.01, ARS §49-480.03 and ARS §49-480.04.

- B. DATA REPORTING: [County Rule 100 §502]
When requested by the Control Officer, the Permittee shall furnish to the Maricopa County Air Quality Division (Division hereafter) information to locate and classify air contaminant sources according to type, level, duration, frequency and other characteristics of emissions and such other information as may be necessary. This information shall be sufficient to evaluate the effect on air quality and compliance with the County or SIP Rules. The Permittee may subsequently be required to submit annually, or at such intervals specified by the Control Officer, reports detailing any changes in the nature of the source since the previous report and the total annual quantities of materials used or air contaminants emitted.

- C. DEVIATION REPORTING: [County Rule 130 §402.4] [County Rule 210 §§302.1 e & 305.1 c]
The Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions. Unless specified otherwise elsewhere in these Permit Conditions, an upset for the purposes of this Permit Condition shall be defined as the operation of any process, equipment or air pollution control device outside of either its normal design criteria or operating conditions specified in this Permit and which results in an exceedance of any applicable emission limitation or standard. The Permittee shall submit the report to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of knowledge of the deviation; and the report shall contain a description of the probable cause of such deviations and any corrective actions or preventive measures taken. In addition, the Permittee shall report within a reasonable time of any long-term corrective actions or preventative actions taken as the result of any deviations from permit requirements.

All instances of deviations from the requirements of this Permit shall also be clearly identified in the semiannual monitoring reports required in the Specific Condition section of these Permit Conditions.

- D. EMERGENCY REPORTING: [County Rule 130 §402.4]
(NOTE: Emergency Reporting is one of the special requirements which must be met by a Permittee wishing to claim an affirmative defense under the emergency provisions of County Rule 130. These provisions are listed earlier in these General Conditions in the section titled

“Emergency Provisions”. Since it is a form of deviation reporting, the filing of an emergency report also satisfies the requirement of County Rule 210 to file a deviation report)

The Permittee shall, as soon as possible, telephone the Control Officer giving notice of the emergency and submit notice of the emergency to the Control Officer by certified mail, facsimile, or hand delivery within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.

E. EMISSION STATEMENTS REQUIRED AS STATED IN THE ACT:

[County Rule 100 §503]

Upon request of the Control Officer and as directed by the Control Officer, the Permittee shall provide the Control Officer with an emission statement, in such form as the Control Officer prescribes, showing measured actual emissions or estimated actual emissions of NO_x and VOC from that source. At a minimum the emission statement shall contain all information contained in the "Guidance on Emission Statements" document as described in the USEPA's Aerometric Information Retrieval System (AIRS) Fixed Format Report (AFP 644). The statement shall contain emissions for the time period specified by the Control Officer. Statements shall be submitted annually.

F. EXCESS EMISSIONS REPORTING: [locally enforceable only] [County Rule 140 §§500]

(NOTE: This reporting subsection is associated with the requirements listed earlier in these General Conditions in the section titled "Excess Emissions".)

1) Excess emissions shall be reported as follows:

- a) The Permittee shall report to the Control Officer any emissions in excess of the limits established either by the Rules or these Permit Conditions. The report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the owner or operator first learned of the occurrence of excess emissions including all available information from paragraph F. 1) b) below of this Permit Condition.
 - (2) Excess emissions report containing all the information described in paragraph F.1) b) below of this Permit Condition within 72 hours of the telephone notification pursuant to paragraph F. 1) a) (1) above of this Permit Condition.
- b) The excess emissions report shall contain the following information:
 - (1) The identity of each stack or other emission point where the excess emissions occurred.
 - (2) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) The time and duration or expected duration of the excess emissions.
 - (4) The identity of the equipment from which the excess emissions emanated.
 - (5) The nature and cause of such emissions.
 - (6) The steps taken if the excess emissions were the result of a malfunction to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction.
 - (7) The steps that were or are being taken to limit the excess emissions. If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from startup or malfunction,

the report shall contain a list of the steps taken to comply with the Permit procedures.

- 2) In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the Permittee provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification that meets the criteria of Section F. 1) of this Permit Condition.

G. OTHER REPORTING:

[County Rule 210 §302.1 h (5)]

The Permittee shall furnish to the Control Officer, within a reasonable time, any information that the Control Officer may request in writing to determine whether cause exists for revising, revoking and reissuing this permit, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Control Officer copies of records required to be kept by this Permit. For information claimed to be confidential, the Permittee shall furnish a copy of such records directly to the Administrator along with a claim of confidentiality as covered elsewhere in these Permit Conditions.

17. RIGHT TO ENTRY AND INSPECTION OF PREMISES:

[County Rules 100 §105 and 210 §305.1f] [SIP Rule 43]

The Control Officer during reasonable hours, for the purpose of enforcing and administering County Rules, or any provision of the Arizona Revised Statutes relating to the emission or control prescribed pursuant thereto, may enter every building, premises, or other place, except the interior of structures used as private residences. Every person is guilty of a petty offense under ARS §49-488 who in any way denies, obstructs or hampers such entrance or inspection that is lawfully authorized by warrant.

The Permittee shall allow the Control Officer or his authorized representative, upon presentation of proper credentials and other documents as may be required by law, to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept pursuant to the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept pursuant to the conditions of the permit;
- C. Inspect, at reasonable times, any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required pursuant to this permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. To record any inspection by use of written, electronic, magnetic, and photographic media.

[Locally enforceable only]

SPECIFIC CONDITIONS:

Definitions

For the purpose of this condition, the following definitions shall apply:

The nameplate capacities for the various emission units are:

- a) CC5 – each turbine – 1,808 MMBtu/hr heat input and 175.2 Mw turbine output
 - b) CC4 – 944.4 MMBtu/hr heat input and 80.3 Mw turbine output
 - c) CC3 – 782 MMBtu/hr heat input and 55.0 Mw turbine output
 - d) CC5 Duct Burners – each burner – 245 MMBtu/hr heat input
 - e) CC4 Duct Burner – 40 MMBtu/hr heat input
 - f) CC5 Cooling Tower – 140,000 gpm capacity
 - g) CC4 Cooling Tower – 40,000 gpm capacity
-
- 1) “TPY” shall be defined as “tons emitted in any rolling 12-month period, with a new 12-month period beginning on the first day of each calendar month.”
 - 2) “Normal operations” for CC3, CC4, and CC5 shall be defined as operation at loads greater than the minimum normal operating load of 60% of the nameplate CT generating capacity.
 - 3) “O&M Plan” shall be defined as the Operations and Maintenance Plan most recently approved either in writing by the Control Officer or by County Rule.
 - 4) The “startup period” shall be defined as the total elapsed time between first fuel firing and achieving the minimum normal operating load.
 - 5) The “shutdown period” shall be defined as the total elapsed time between operations below minimum normal operating load and cessation of fuel firing.
 - 6) “Malfunctions” shall be defined as any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal and usual manner, but does not include failures caused by poor maintenance, careless operation, or any other upset condition or equipment breakdown that could have been prevented by the exercise of reasonable care. During the first 180 days of shakedown operation of CC3-CC5, malfunctions will also include periods of excess emissions caused by poor combustion turbine tuning.

18. ALLOWABLE EMISSIONS :

A. Facility - Wide Requirements:

1) Offsite Sulfur Oxides limits:

The Permittee shall not emit into the ambient air any sulfur oxide in such manner and amounts as to result in ground level concentrations at any place beyond the premises on which the source is located exceeding those limits shown in the following table:

Concentration of Sulfur Dioxide (ug/cubic m)	Averaging Time (hours)
850	1
250	24
120	72

[SIP Rule 32 F]

2) Opacity Limits

- a) The Permittee shall not discharge into the ambient air from any single source of emissions any air contaminant other than uncombined water, in excess of 20 percent opacity, except as described in County Rule 300 Section 302.

[County Rule 300 §§ 301, 302] [locally enforceable only]

- b) Except as otherwise provided in Regulation I, Rule 4, Exceptions, the opacity of any plume or effluent from any source of emissions, other than uncombined water, shall not be greater than 40 percent opacity as determined by Reference Method 9 in the Arizona Testing Manual.

[SIP Rule 30]

- c) Opacity Determination: Opacity shall be determined by observations of visible emissions conducted in accordance with EPA Reference Method 9 except opacity of visible emissions from intermittent sources. Opacity of visible emissions from intermittent sources shall be determined by observations conducted in accordance with EPA Reference Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300 §§501, 502] [locally enforceable only]

B. Allowable Emissions For Combustion Turbines :

1) Particulate matter limits:

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any fuel burning equipment or stationary rotating machinery having a heat input rate of 4200 million Btu per hour or less in excess of the amounts calculated by the following equation:

$$E = 1.02 Q^{0.769}$$

where:

E= the maximum allowable particulate emissions rate in pounds-mass per hour.

Q= the heat output in million Btu per hour.

[A.A.C. R-18-2-703, 719, 724, SIP Rule 31, H]

2) Annual Emission Limits for CC3, CC4, CC5 and the cooling towers for CC4 and CC5.

[County Rule 240 §305 and §308]

The actual tons per year of emissions, based on a 365 day rolling average, from units CC3, CC4, CC5, and the cooling towers for CC4 and CC5, including startup and shutdown emissions, but not including malfunction emissions, shall not exceed the allowable emissions listed in Table 1. As stipulated in Section 20, Monitoring Requirements, operating data and estimated actual emissions shall be compiled daily to present data from continuous emissions monitors and hourly emissions computed from data loggers programmed to estimate emissions during startup and shutdown mode. The daily data shall provide rolling 365 day averages of total emissions for these sources. The daily data shall be maintained on site for review by MCESD and submitted in semi-annual reports to MCESD.

Table 1
Allowable Combined Emissions for CC3, CC4, CC5,
and CC4 and CC5 Cooling Tower emission units (tpy)

Parameter	NO _x	CO	SO ₂	VOC	PM/PM10 ¹
Annual Emission Limits	405.1	184.2	16.3	56.1	108.3

Footnote 1: This value represents PM10 emissions. For emissions from the cooling towers, total PM is twice the PM 10 value. For emissions from combustion equipment, PM equals the PM10 value.

Maximum conditions for two or more individual pollutants do not necessarily occur under the same operating scenario.

- 3) Short-term Emission Limits – Startup/Shutdown for CC3, CC4, CC5 and the cooling towers for CC4 and CC5.

[County Rule 240 §305 and §308]

The maximum short-term emissions from CC3, CC4 and CC5 during periods of startup and shutdown shall not exceed the allowable emissions listed in Table 2a, excluding periods of malfunctions. Startup and shutdown (SU/SD) are defined as any period of operation when the gas turbine is operating at equal to or less than 60% of its rated output power, excluding periods of malfunction.

Table 2a
Short-term Allowable Emissions during SU/SD (lb/hr)

Unit #	NO _x	CO	VOC	PM10	SO ₂
Averaging Interval	1-hour	1-hour	1-hour	1-hour	1-hour
CC3	273.7	360	12.4	5.0	44.14
CC4	87.8	435	15	5.0	0.424
CC5 (per turbine)	169	870	29	8.0	1.002

- 4) Short-term Emission Limits – Normal Operation for CC3, CC4, CC5 and the cooling towers for CC4 and CC5.

[County Rule 241 §301, County Rule 320 §308, locally enforceable only] [County Rule 360]
 [40 CFR 60][SIP Rule 32F] [County Rule 500 §300] [County Rule 510 § 300]

The maximum short-term emissions from CC3, CC4 and CC5 during periods of normal operation shall not exceed the allowable emissions listed in Table 2b, excluding periods of startup and shutdown, malfunctions, and equipment shakedown prior to commercial operations. Normal operation is defined as any period of operation when the gas turbine is operating at greater than 60% of its maximum capacity.

The maximum short-term emissions of ammonia from CC3 and CC5 shall be limited to 10 ppmv (24 hour rolling average) during normal operations, excluding periods of startup and shutdown, malfunctions, and equipment shakedown prior to commercial operations. Normal operation is defined as any period of operation when the gas turbine is operating at greater than 60% of its maximum capacity.

The maximum short-term NOx emissions from the duct burners on CC4 and CC5 shall be limited to 0.20 lb/MMBtu

Table 2b
Maximum Short-term Allowable Emissions during normal operations (lb/hr)

Unit #	NOx	CO	VOC	PM10	SO2
Averaging Interval	3-hour	3-hour	3-hour	3-hour	3-hour
CC3 - Gas	34.3	25.08	5.6	6.9	0.63
CC3 - Oil	56.3	38.7	6.85	49.2	44.14
CC4	34.2	B/L	B/L	B/L	B/L
CC5 (per turbine)	24.3	B/L	B/L	B/L	B/L

Note: the designation “B/L” refers to contaminants for which the source is required to meet air flow, heat rate, or fuel quality dependent BACT or LAER emission rates, as shown in the next section. The short-term allowable emission rate for these pollutants shall be the BACT/LAER emission rate.

[40 CFR §60.44b(1)(1), §60.332(a) and (b), §60.333].

- 5) LAER and BACT Emission Limits for CC3, CC4, CC5 and the cooling towers for CC4 and CC5.

The emissions for PM10, VOC, and CO shall be calculated on a 3-hour rolling average, excluding periods of startup, shutdown, malfunction, and equipment shakedown prior to commercial operations. Maximum short-term emissions are estimated at 100% capacity.

The PM₁₀ and VOC emissions from CC4 and CC5 emission units shall not exceed the allowable emissions listed in Table 3. The allowable limit shall be the greater of the lb/hr or lb/MMBtu emission rate

The CO emissions from CC4 and CC5 emission units during normal operations shall not exceed 6 ppmvd at 15% O₂, nor shall CO emissions from CC4 exceed 12.5 lb/hr, nor shall CO emissions from each turbine of CC5 exceed 26.4 lb/hr.

Table 3
BACT/LAER Allowable Emissions (3-hour rolling average)

Unit #	PM₁₀ LAER Limit	VOC LAER Limit
CC5 – Normal Operations (per turbine)	8.0 lb/hr or 0.00443 lb/MMBtu	3.29 lb/hr or 0.00182 lb/MMBtu
CC5 – Normal Operations and Duct Burner (per turbine)	8.0 + 2.675 lb/hr or 0.00514 lb/MMBtu	3.29 + 1.88 lb/hr or 0.00249 lb/MMBtu
CC5 – Power Augmentation and Duct Burner (per turbine)	8.0 + 2.675 lb/hr or 0.00486 lb/MMBtu	3.50 + 1.88 lb/hr or 0.00245 lb/MMBtu
CC4 - Normal Operations	5.0 lb/hr or 0.00529 lb/MMBtu	2.27 lb/hr or 0.0024 lb/MMBtu, reported as methane
CC4 – Normal Operations and Duct Burner	5.0 + 0.40 lb/hr or 0.00549 lb/MMBtu	2.27 + 0.38 lb/hr or 0.0027 lb/MMBtu, reported as methane

6) Emission Limits for CC5 Auxiliary Boiler

The emissions from the CC5 auxiliary boiler shall not exceed:

NO_x = 13 ppmvdc at 3% O₂.

CO = 50 ppmvdc at 3% O₂

[County Rule 220 §304]

7) Permit Shield:

Compliance with the conditions of this Permit shall be deemed compliance with the applicable requirements identified in Appendix “B” of this Permit. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §§405.7, 407]

19. OPERATIONAL REQUIREMENTS:

A. Facility - Wide Operational Requirements:

- 1) The Permittee shall combust only pipeline quality natural gas in all devices.

If pipeline quality natural gas is not available due to a natural gas emergency, natural gas curtailment, unavoidable interruption of supply (e.g., catastrophic pipeline failure), or other similar event, the Permittee may combust fuel oil with a sulfur content of 0.05% by weight or less under such conditions as are justified. When the conditions justifying the use of low sulfur fuel oil no longer exist, the Permittee shall combust only pipeline quality natural gas. In addition when firing fuel oil, CC3 shall combust only distillate oil with a maximum allowable sulfur content of 0.05% by weight, minimum HHV of 133,333 Btu/gal, and a minimum API Gravity of 30. CC3 shall not consume more than 500,000 gallons of fuel oil per year.

[County Rule 240.308.1a] [County Rule 320 § 306.4] [SIP Rule 32F] [CAA §189(b)(1)(B)]
[County Rule 210 §302.1h7]

- 2) The Permittee shall not emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

[SIP Rule 32] [County Rule 320 § 300] (locally enforceable only)

- 3) Materials including, but not limited to solvents or other volatile compounds, paints, acids, alkalies, pesticides, fertilizer and manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory.

[SIP Rule 32][County Rule 320 § 302] (locally enforceable only)

- 4) Where a stack, vent or other outlet is at such a level that air contaminants are discharged to adjoining property, the Control Officer may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet to a degree that will adequately dilute, reduce or eliminate the discharge of air contaminants to adjoining property.

[SIP Rule 32][County Rule 320 § 303] (locally enforceable only)

B. Operational Requirements for the Cooling Tower:

The cooling tower shall at all times be equipped and maintained with high efficiency drift eliminators certified by the cooling tower vendor to achieve less than 0.001 percent drift. The total dissolved solids (TDS) content of the cooling water in the cooling tower shall not contain more than 12,000 ppm TDS.

[County Rule 240, §308] [County Rule 210][CAA §189(b)(1)(B)]

C. Operational Requirements for the Selective Catalytic Reduction Emission Control Systems

- 1) The Permittee shall install, operate, and maintain a Selective Catalytic Reduction (SCR) system as part of CC 3 and CC 5.
- 2) The Permittee shall submit an approvable Operations and Maintenance (O&M) plan to the Department for each SCR system required by these Permit Conditions. The plans shall be in a

format acceptable to the Department and shall specify the procedures used to maintain the SCR system. The O&M plan shall be submitted within 30 days after the equipment covered has been started up.

- 3) The Permittee shall at all times comply with the currently approved version of the O&M Plan.
- 4) The SCR control system shall be designed so it will not inject ammonia into the SCR system when the inlet temperature to the catalyst is less than the Minimum Catalyst Temperature to be established as part of the O&M Plans. Until the O&M plan for the SCR is approved, the Permittee shall not inject ammonia into the SCR when the inlet temperature is less than the Minimum Catalyst Temperature recommended by the catalyst manufacturer.

[County Rule 210 §302.1(c)(1) and §406]

D. Operational Requirements for the Continuous Emissions Monitoring Systems

- 1) Required monitoring systems shall meet or exceed all applicable design, installation, operational, quality assurance, and other applicable requirements of 40 CFR Part 60b(d), 40CFR Part 60b(e) and 40 CFR 75.
- 2) The fuel flow monitor shall meet or exceed specifications contained in the current (as of July, 2000) American Gas Association Report Number 3.
- 3) The Permittee shall ensure that the CEMS are in operation and monitoring unit emissions at all times that the Combustion Turbines combust any fuel except during periods of calibration, quality assurance, preventive maintenance, repair, back-ups of data from the data acquisition and handling system, or recertification. Malfunctions shall be recorded and reported as required in 40 CFR Part 60.48b(c), 40CFR Part 60.48b(f), 40CFR Part 60.49b(g) and 40 CFR 75.
- 4) The Permittee shall ensure that the design, installation, operation, maintenance, O&M/QA Plan(s), and on-site spare parts inventory are sufficient to ensure that the CEMS meet the data capture requirements of 40 CFR Parts 60 Appendix B and F, 40 CFR 75.21.
- 5) The Permittee shall submit an approvable Operations and Maintenance (O&M) plan to the Department for each Continuous Emissions Monitoring System (CEMS) required by these Permit Conditions. The plans shall be in a format acceptable to the Department and shall specify applicable operating parameters necessary to ensure continuous and accurate emissions monitoring. The O&M plan shall be submitted within 30 days after the equipment covered has been started up.

[40 CFR 75, Subpart C]

- 6) The Permittee shall submit an approvable Quality Assurance Plan (QAP) to the Department for each CEMS required by these Permit Conditions. The plans shall be in a format acceptable to the Department. If the QAP plan has not been approved as part of the application for this permit, then the QAP shall be submitted within 30 days after the equipment covered has been started up.

[40 CFR 75, Subpart C]

- 7) A combined O&M Plan and Quality Assurance Plan for both CEMS may be submitted.

[40 CFR 75, Subpart C]

- 8) The Permittee shall at all times comply with the currently approved version of the O&M and QA Plans.

[40 CFR 75, Subpart C]

- 9) Within 90 days after commencement of commercial operations (as defined by 40 CFR 72.2), the Permittee shall certify the CEMS with a Relative Accuracy Test Audit (RATA), linearity check, cylinder gas audit (CGA), bias check, 7-day calibration error check, and cycle time check.

[40 CFR 75.4(b)(2) and 75.20(c)]

- 10) The Permittee shall at least annually conduct a RATA and bias check. The Permittee shall at least quarterly conduct linearity checks and cylinder gas audits (CGA). The Permittee shall at least daily conduct calibration error and drift checks. More frequent audits and checks shall be conducted as required by 40 CFR 60 and 40 CFR 75.

- 11) The Permittee shall ensure that all calibration gases (including zero gases) are certified and current at all times.

[40 CFR 60.47a(i)(2), and 40 CFR 75.22(c)]

- 12) The Permittee shall re-calibrate any CEMS after any maintenance activity that could affect the system calibration and shall re-certify as required by and within the time periods required by 40 CFR 75.20(b) whenever the Permittee makes a replacement, modification, or change that may significantly affect the ability of the system to accurately measure or record emissions.

[40 CFR 75.20(b)]

- 13) The Permittee shall develop and implement daily, monthly, quarterly, and annual maintenance checklists to ensure proper operation and accuracy of the CEMS. The checklists will be established as part of the O&M and QA Plans.

- 14) The Permittee shall maintain records of all certifications, calibrations, testing, maintenance (including completed maintenance checklists), and repairs made to the CEMS.

[County Rule 210 §302.1(c)(1)][40 CFR 60 Subparts Da and GG]

[40 CFR 75 Subparts A, B, C, Appendix A, Appendix B]

E. Operational Requirements for the Oxidation Catalyst Emission Control System

- 1) The Permittee shall install, operate, and maintain an Oxidation Catalyst Emission Control System as part of, CC4 and CC5.
- 2) The Permittee shall submit an approvable Operations and Maintenance (O&M) plan to the Department for each OC system required by these permit conditions. The plans shall be in a format acceptable to the Department and shall specify the procedures used to maintain the OC system. The O&M plan shall be submitted within 30 days after the equipment covered has been started up.
- 3) The Permittee shall at all times comply with the currently approved version of the O&M Plan.

[County Rule 210 §302.1(c)(1) and §406]

- F. The Permittee shall use shall use operational practices for combustion turbines that ensure good combustion control. For purposes of this condition, "Good combustion control for combustion turbines shall mean that the temperature spread across the combustion burners is no greater than 100⁰ F." If a valid temperature spread of greater than 100⁰ F is observed across the burners, corrective action shall be taken within three hours to either (1) reduce the output of the units until the spread is less than 100⁰ F or (2) shutdown the unit until the problem causing the temperature imbalance is corrected.

[County Rule 210§302][CAA §189(b)(1)(B)]

G. Operational Requirements for CC5 Auxiliary Boiler

The Permittee shall establish initial optimal baseline concentrations for NOx and CO utilizing the initial design burner specifications or manufacturer's recommendations to ensure good combustion practices. Tune the unit annually in accordance with good combustion practices or a manufacturer's procedure, if applicable, that will include the following at a minimum:

- 1) Inspect the burner system and clean and replace any components of the burner as necessary to minimize emissions of NOx and CO, and
- 2) Inspect the burner chamber for areas of impingement and remove if necessary, and
- 3) Inspect the flame pattern and make adjustments as necessary to optimize the flame pattern, and
- 4) Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly, and
- 5) Measure the NOx and the CO concentration of the effluent stream after each adjustment was made with a handheld portable monitor to ensure optimal baseline concentrations are maintained.

[County Rule 323§304][locally enforceable only]

20. MONITORING/RECORDKEEPING REQUIREMENTS

A. Monitoring/Recordkeeping Requirements for the Combustion Turbines:

- 1) The Permittee shall hourly monitor and record the hours of operation and operating mode (start-up, or normal) of each Combustion Turbine and Auxiliary Boiler; the Combustion Turbine exhaust temperature prior to entering the Selective Catalytic Reduction System; the amount of natural gas combusted in each of the Combustion Turbines, each of the Duct Burners and Auxiliary Boiler, and the electrical energy output of each Combustion Turbine. The Permittee shall monthly calculate the rolling twelve-month average of total hours of operation in each mode for each Combustion Turbine and Auxiliary Boiler.

[County Rule 210 302.§1(c)(1)][County Rule 323 §501.1]

- 2) The Permittee shall record the date that the tuning procedure was performed on the CC5 auxiliary boiler and at a minimum: stack gas temperature, flame conditions, nature of the adjustment and results of the nitrogen oxide and carbon monoxide concentrations obtained by using a handheld monitor after each adjustment.

[County Rule 323 §501.4][locally enforceable only]

- B. The Permittee shall monthly conduct a facility walk-through and observe visible emissions from each Combustion Turbine and Auxiliary Boiler. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information.

[County Rules 300, 323 §501.1, 210 §302.1(c)(1) and SIP Rule 30]

- C. If visible emissions are observed from any device capable of emitting any air contaminant other than condensed water containing no more than analytical trace amounts of other chemical elements or compounds and the facility has never had an opacity violation in the 12 months preceding the observation; the Permittee shall obtain an opacity reading conducted in accordance with EPA Reference Method 9 by a certified visible emissions (VE) reader. This reading shall be taken within 3 days of the observance of visible emissions and taken weekly thereafter during each week that the unit is in operation until there are no visible emissions. If the problem is corrected before three days has passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. The Permittee shall log the visual observations, including the date and time when that reading was taken, results of the reading, name of the person who took the reading and any other related information. If an opacity violation has occurred at the facility in the 12 months preceding the observation of visible emissions, the required EPA Reference Method by a certified visible emissions (VE) reader shall be taken within 24 hours of the observation of visible emissions.

[County Rule 210 §302.1(c)(1)] [SIP Rule 31]

- D. Opacity shall be determined by observations of visible emissions conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except opacity of visible emissions from intermittent sources as defined by County Rule 300 §201. Opacity of visible emissions from intermittent sources shall be determined by observations conducted in accordance with 40 CFR Part 60 Appendix A, Method 9, except that at least 12 rather than 24 consecutive readings shall be required at 15-second intervals for the averaging time.

[County Rule 300 §§501, 502][locally enforceable only]

- E. The Permittee shall monitor for compliance with the particulate matter emissions limits of the permit by taking a visual emission observation of the stack emissions from each Combustion Turbine and Auxiliary Boiler during each week of operation that the equipment was used more than 10 hours. If emissions are visible, the Permittee shall obtain an opacity reading conducted in accordance with 40 CFR Part 60 Appendix A, Method 9 by a certified reader. This reading shall be taken within 3 operating days of the visible emission and taken thereafter weekly for each week when operations occur until there are no visible emissions. If the condition causing the visible emissions is eliminated before three days have passed, and no emissions are visible, the Permittee shall not be required to conduct the certified reading. If the visible emissions are present, the Control Officer may require emissions testing by other approved Reference Methods such as 40 CFR 60 Appendix A Method 5 to demonstrate compliance with the particulate matter emission limits of these Permit Conditions.

For purposes of these Permit Conditions, a certified visible emissions reader shall mean an individual who, at the time the reading is taken, is certified according to the County Rule Appendix C, Section 3.4.

[County Rule 210 §302.1.c(2) and SIP Rule 31]

- F. The Permittee shall maintain a log of complaints of odors detected off-site. The log shall contain a description of the complaint, date and time that the complaint was received, and if given, name and/or phone number of the complainant. The logbook shall describe what actions were performed to investigate the complaint, the results of the investigation, and any corrective actions that were taken.

[SIP Rule 32][County Rules 320 and 210 §302.1]

- G. The Permittee shall monitor for compliance with the sulfur dioxide limits of this permit by obtaining and recording the sulfur content of the pipeline quality natural gas used in the Combustion Turbines and the Auxiliary Boiler as follows.

- 1) Effective the date of this permit, sulfur content monitoring shall occur twice monthly for six months. If this monitoring shows a fuel sulfur content within plus or minus fifteen percent of the average and less than 0.75 grains per 100 standard cubic feet, then sulfur monitoring shall be conducted once per quarter for six quarters.
- 2) If the sulfur content shows a fuel sulfur content within plus or minus fifteen percent of the average and less than 0.75 grains per 100 standard cubic feet, then sulfur monitoring shall be conducted twice per annum during the first and third quarters of each year.
- 3) If any sulfur content results are greater than 0.75 grains per 100 standard cubic feet, the Control Officer shall be immediately notified and sulfur content monitoring shall be conducted weekly until notified otherwise by the Control Officer.
- 4) If there is a change in fuel supplier, the Control Officer shall be immediately notified and sulfur content monitoring shall be conducted weekly until notified otherwise by the Control Officer.
- 5) If there is a substantial change in fuel quality such that the sulfur content or heat content (gross caloric value) of the fuel differs by more than fifteen percent of the average recorded for the previous two years, the Control Officer shall be immediately notified and sulfur content monitoring shall be conducted weekly until notified otherwise by the Control Officer.

- H. The Permittee shall keep all the records of the fuel supplier certification for the diesel fuel being combusted for at least five years. The supplier certification shall include:

- 1) the name of the supplier,
- 2) the sulfur content of the fuel,
- 3) the method used to determine the sulfur content of the fuel,
- 4) the date that the fuel was delivered to the site, and
- 5) the date that the fuel was sampled for sulfur content.

[County Rules 320, 210 §302.1.c and SIP Rule 32]

- I. In cases where the Permittee combusts fuel oil, the Permittee shall monitor and record hours of operation and fuel usage.

[County Rule 210 §302.1]

- K. The requirements of this section apply to CC3, CC4, and CC5 as specified.

[County Rule 210 §302.1]

- 1) Within 90 days after commencement of commercial operation (i.e., “Commence commercial operation means to have begun to generate electricity for sale, including the sale of test generation” as defined by 40 CFR 72.2), a continuous emissions monitoring system (CEMS) shall be installed, certified, and operated on CC3, CC4, and CC5 emission units. The CEMS, at a minimum, shall consist of a NO_x concentration monitor, a CO concentration monitor, and an O₂ or CO₂ diluent gas monitor in accordance with the applicable provisions of 40 CFR Part 75 and 40 CFR Part 60.48b(b), 60.49b(b) Appendices B and F.
- 2) Within 90 days after the commencement of commercial operations (as defined by 40 CFR 72.2), natural gas fuel flowmeters shall be installed, certified, and operated on each fuel line to CC3, CC4, and CC5 emission units to monitor the unit-specific fuel flow to the combustion turbines and duct burners in accordance with 40 CFR Part 75. An oil fuel flowmeter shall also be installed, certified, and operated on CC3 to monitor the fuel flow to the unit.
[40CFR60.49b(d)]
- 3) The operating and emissions information required in Sections 1 and 2 above shall be compiled by a computerized Data Acquisition System (DAS), which shall be programmed to calculate and track the short-term and annual emission rates of all compounds, using the measurements and formulas described herein.
- 4) NO_x emissions for normal operations, startup and shutdown emissions shall be measured using the continuous emission monitoring system (CEMS) applied to each of the emission units. The Permittee shall daily calculate the 365-day rolling average NO_x emission to verify that the NO_x emission limit in Table 1 of permit condition 18 is not exceeded.
- 5) CO emissions for normal operations and startup/shutdown shall be measured using a CEMS that has been installed, certified, and operated in accordance with 40 CFR Part 60. Either a single dual-range CO analyzer or two CO analyzers calibrated for different concentration ranges may be used. The applicant shall notify the APCO prior to startup which monitoring method will be implemented.
The Permittee shall daily calculate the 365-day rolling average CO emission to verify that the CO emission limit in Table 1 of permit condition 18 is not exceeded.

- 6) In the event that the CO analyzer measuring startup/shutdown emissions is not operational or cannot reliably document emissions, startup/shutdown CO emissions shall be determined by monitoring the total elapsed time in hours during each phase of the startup/shutdown sequence (rounded to hundredths), and multiplying by the emission rates listed in Table 4. The calculation shall be made by the computerized Data Acquisition System (DAS) described in Condition 3 of Section V. Monitoring Requirements.

Table 4
Calculated Startup/Shutdown Emissions

Unit	Pollutant	Startup/Shutdown Phase and Operational Criteria	lb/hr rate
CC5	CO	Phase 1 – Oxidation Catalyst Temp < 450F	870.0
CC5	CO	Phase 2 and 3 – Oxidation Catalyst Temp > 450F	87.0
CC5	VOC	Phase 1 – Oxidation Catalyst Temp < 450F	29.0
CC5	VOC	Phase 2 and 3 – Oxidation Catalyst Temp > 450F	20.3
CC4	CO	Phase 1 – Oxidation Catalyst Temp < 450F	435.0
CC4	CO	Phase 2 and 3 – Oxidation Catalyst Temp > 450F	43.5
CC4	VOC	Phase 1 – Oxidation Catalyst Temp < 450F	15.0
CC4	VOC	Phase 2 and 3 – Oxidation Catalyst Temp > 450F	10.5
CC3	CO	Phase 1 and 2 – All Startup/shutdown Emissions	360.2
CC3	VOC	Phase 1 and 2 – All Startup/shutdown Emissions	12.4

- 7) VOC emissions for normal operations shall be determined through fuel usage monitoring and application of the appropriate emission factors for CC4 and CC5 contained in Table 3 and a factor of 0.0048 lb/MMBtu for CC3 when firing natural gas and a factor of 0.0085 lb/MMBtu when firing oil. Startup/shutdown VOC emissions from CC3, CC4, and CC5 will be determined by monitoring the total elapsed time during each phase of the startup/shutdown sequence, and multiplying by the emission rates listed in Table 4. The VOC emissions from CC3, CC4, and CC5, including normal operations and startup and shutdown emissions, shall be monitored with an automatic data acquisition and handling system. The system must be capable of automatically performing the VOC emission calculations described above. The Permittee daily shall calculate the 365-day rolling average VOC emission to verify that the VOC emission limit in Table 1 of permit condition 18 is not exceeded.
- 8) PM10 emissions for normal operations and startup/shutdowns shall be determined through fuel usage monitoring and application of the appropriate emission factors for CC4 and CC5 contained in Table 3 and a factor of 0.00639 lb/MMBtu for CC3 for natural gas and 0.061

lb/MMBtu for fuel oil. The PM10 emissions from CC3, CC4, and CC5, including normal operations and startup and shutdown emissions, shall be monitored with an automatic data acquisition and handling system. The system must be capable of automatically performing the PM10 emission calculations described above.

The Permittee shall daily calculate the 365-day rolling average PM10 emission to verify that the PM10 emission limit in Table 1 of permit condition 18 is not exceeded.

- 9) PM10 emissions from the CC4 and CC5 cooling towers will be determined through monthly testing of TDS concentrations and calculations using the following equation:

$$\text{PM10 (lb/hr)} = \text{Tower capacity (gpm)} * \text{TDS (ppm)} * 1.26\text{E-9}$$

where $1.26\text{E-9} = (8.4 \text{ lb/gal}) (0.0005\% \text{ drift}) (60 \text{ min/hr}) (0.5 \text{ PM10/PM}) (10\text{E-6/ppm})$

SO2 emissions from gas firing during normal operations and startup/shutdowns shall be determined through fuel usage monitoring and application of the Acid Rain (40 CFR 75) natural gas emission factor of 0.0006 lb/MMBtu. SO2 emissions from oil firing of CC3 shall be determined in accordance with the provisions of 40 CFR Part 75, Appendix D.

- L. The Permittee shall monthly inspect the Wet Cooling Tower drift eliminators for proper installation, maintenance, and operation. The results of the inspection shall be recorded in a facility log.
[County Rule 210 §302.1(c)(2)]
- M. The Permittee shall daily monitor and record the conductivity of the cooling tower water and shall monthly monitor and record the Total Dissolved Solids (TDS) content of the cooling tower water.
[County Rule 210 §302.1]
- N. To monitor for good combustion the Permittee shall install and maintain combustion monitors on Combustion Turbines. The Permittee shall daily record temperature spread across the combustion burners for each Combustion Turbine except CC3, CC4, CC5. The Permittee shall keep record of any corrective actions taken in a case the temperature spread was greater than 100 Degrees F.
[County Rule 210 §302.1]

21. REPORTING REQUIREMENTS

- A. The Applicant shall furnish the APCO written notification of the status of CC5 as follows:
- 1) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date,
 - 2) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable Subpart or in Section 60.14(e). This notice shall be postmarked within 60 days or as soon as commenced and shall include information describing the precise nature of the change, present and proposed emissions control systems, productive capacity of the facility before and after the change, and the expected completion date of the change.
 - 3) A notification of the anticipated date for conducting the opacity observations required by Section 60.11(e)(1). The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date,
 - 4) A notification of the date of construction (or reconstruction) of an affected facility is commenced postmarked no later than 30 days after such date,
 - 5) A notice of the anticipated date of initial startup of an affected facility postmarked within 15 days after such date.

[County Rule 360 § 301][40 CFR §60.7][40 CFR §60.49b(a)]

- B. Records of any monitoring required by this Permit shall include the following:

- 1) The date, place as defined in the permit, and time of sampling or measurements;
- 2) The date(s) analyses were performed;
- 3) The company or entity that performed the analyses;
- 4) The analytical techniques or methods used;
- 5) The results of such analyses; and
- 6) The operating conditions as existing at the time of sampling or measurement

[County Rule 210 §§302.1 d (1) and 305.1 b (1)]

- C. A file shall be maintained of all measurements including continuous monitoring system evaluations, all continuous monitoring system or monitoring device calibration checks, adjustments and maintenance performed on these systems or devices as required by 40 CFR Part 60 or Part 75. The records shall be recorded in a permanent form suitable for inspection. The file shall be maintained for at least five years following the date of such measurement, maintenance, report, or record.

[County Rule 210 and 360] [40 CFR 60]

- D. The Permittee shall file a semiannual Compliance Report no later than April 30th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than October 31st and shall report the compliance status of the source during the period between April 1st and September 30th of the current year. The initial Compliance Report shall reflect the compliance status of the source beginning with the date of the permit issuance.

[County Rule 210 § 302.1 e]

The Compliance Report shall include the following information:

- 1) Summary of compliance status with respect to each condition contained in this permit; including, but not limited to a description of the basis for the summary conclusions with respect to each permit condition.
- 2) Description of and an explanation for any deviations from any permit condition at any time.
- 3) A certification as to the truth and accuracy of the information provided.
- 4) In addition to the summary information provided in the Compliance Report, the Permittee shall maintain on site at least the following information that demonstrates the conclusions reached in the Compliance Report:
 - a) Hours of the operation and amount of fuel burned each hour for each combustion turbine, auxiliary boiler.
[County Rule 320] [SIP Rule 32]
 - b) Electrical energy output of each Combustion Turbine for each hour of operation.
[County Rule 360 and 40 CFR 60.47a]
 - c) Dates on which visible emissions observations were taken, the test method used, and the results of the observations;
[County Rule 300 and SIP Rule 30]
 - d) Fuel supplier certification regarding sulfur content for all fuel combusted;
[County Rule 320] [SIP Rule 32]
[County Rule 210]
 - e) Continuous Emissions Monitoring data related to the emission limits contained in this permit, calibrations, quality assurance, performance demonstrations, and certifications for the reporting period.
 - f) Stack emissions test results related to emission limits and/or operational requirements in this Permit.
 - g) Cooling tower inspection log and results of conductivity and TDS monitoring.
 - h) Odor log.
 - i) Good combustion monitoring records for Combustion Turbines.
 - j) Any other records and reports required by any Permit Condition contained in this Permit.
 - k) In cases where the Permittee combusts fuel oil, the Permittee shall submit monthly reports to the Control Officer detailing its efforts to obtain pipeline quality natural gas, and the reason(s) necessitating the combustion of fuel oil.

E. Excess emissions shall be reported as follows:

- 1) The Permittee shall report to the Control Officer any emissions in excess of the limits established either by the Rules or these Permit Conditions. The report shall be in two parts as specified below:
 - a) Notification by telephone or facsimile within 24 hours of the time when the owner or operator first learned of the occurrence of excess emissions.
 - b) Detailed written notification within 72 hours of the telephone notification.

The excess emissions report shall contain the following information:

- a) The identity of each stack or other emission point where the excess emissions occurred.
 - b) The magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - c) The time and duration or expected duration of the excess emissions.
 - d) The identity of the equipment from which the excess emissions emanated.
 - e) The nature and cause of such emissions.
 - f) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunction.
 - g) The steps that were or are being taken to limit the excess emissions. If this Permit contains procedures governing source operation during periods of startup or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the Permit procedures.
- 2) In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to Rule 100 §502.3(a)(2).

[County Rule 210 § 302.1 e and 360] [40 CFR 60.49b(h)(2)(i)]

- F. The Permittee shall develop and maintain written O&M Plans for all components integral to the equipment used to monitor, control or limit emissions from combustion Units CC3, CC4, CC5 and Cooling Towers CC4 and CC5. These O&M Plans shall be approved either in writing by the Control Officer or by County Rule. The O&M Plans developed for monitoring equipment shall meet the applicable content requirements of 40 CFR Part 75 and Part 60 Appendix F. Development, maintenance of, and operating in accordance with the approved O&M Plans shall be required as an element to demonstrate compliance with this Permit.

[County Rule 210 § 302.1 e, 305, and 360] [40 CFR 60]

22. TESTING REQUIREMENTS

A. The following apply to all emissions testing required by this Permit Condition:

- 1) The Permittee shall submit an approvable test protocol to the Department, for review and approval at least 30 days prior to the emissions test. A fee for each stack to be tested shall be submitted with the test protocol as required by Rule 280.

[County Rule 270 and 280 §301.5]

- 2) The Permittee shall notify the Department in writing at least two weeks in advance of the actual time and date of the emissions test so that the Division may have a representative attend.

[County Rule 270 §404]

- 3) The Permittee shall complete and submit a report to the Department within 30 days after completion of the emissions test. The report shall summarize the results of the testing in sufficient detail to allow a compliance determination to be made.

[County Rule 270 §401]

Note: All protocols, notifications and reports required by this permit condition should be addressed to the attention of the Compliance Testing Supervisor.

The requirements of the following section will become effective upon the commercial operation of CC4 or CC5, whichever occurs earlier.

- B. Within 60 days after achieving the maximum production rate of the affected emission units, but not later than 180 days after the initial startup of the equipment (as defined by 40 CFR 60.2), and at such other times as specified by MCESD, the owner/operator shall conduct performance tests for all contaminants from each unit as shown below or for other pollutants that may be required by MCESD. The performance tests shall be conducted to demonstrate compliance with the emission limits specified in Section IV. Emission Limits

Opacity testing shall be conducted for CC3, CC4, and CC5 when firing natural gas at +/- 5% of nameplate capacity.

Testing shall be conducted for CC3, CC4, and CC5 for VOC, NO_x, CO, SO₂, and PM₁₀ when firing natural gas under the operating scenarios outlined in Table 5. Separate tests shall be conducted for each of the two CTs on CC5. All tests shall be three hours in duration.

Testing for the CC4 and CC5 duct burners will follow the requirements listed at 40 CFR Part 60.46b(f) and CFR Part 60.46b(c).

Table 5
Stack Testing Requirements

Test No.	Load Condition	Duct Burners	Power Augmentation
1	60% - 80% max load	Off	Off
2	+/- 5% of nameplate capacity	Off	Off
3	60% - 80% max load	Off	On
4	+/- 5% of nameplate capacity	Off	On
5	60% - 80% max load	On	Off
6	+/- 5% of nameplate capacity	On	Off
7	60% - 80% max load	On	On
8	+/- 5% of nameplate capacity	On	On

If deemed appropriate by the Control Officer, SO₂ emissions may be calculated based upon fuel sulfur content and fuel consumption during the source test.

In addition to the above tests under natural gas firing scenarios, the owner/operator shall conduct:

- 1) two performance test for CC3 for VOC, NO_x, CO, SO₂, and PM₁₀ while firing fuel oil; one test at an operating load at 60-80% of maximum rated power output, and one test at an operating load +/- 5% of nameplate capacity;
- 2) one performance test for CC3 and CC5 for Ammonia while firing natural gas at an operating load of +/- 5% of nameplate capacity.
- 3) periodic testing

The Permittee shall conduct periodic testing to monitor for ongoing compliance as follows:

- 1) One performance test annually for CC3, CC4, and CC5 (both turbines) for PM₁₀ and VOC when firing natural gas at +/- 5% of nameplate capacity.
- 2) One performance test for CC3 and CC5 for Ammonia every five years. This testing shall be conducted each time the permit is renewed.

Based on the initial performance test data, the Permittee shall develop NO_x and CO emission rate curves to determine the emission rates across the turbine load range.

The Permittee is only required to conduct one set of performance tests for each type of turbine and each type of fuel.

The above testing requirements represent the minimum level of testing to monitor for compliance with the emission limits in this permit. Nothing in this section shall prevent the Control Officer from requiring additional source testing as deemed necessary to ensure permit compliance and protection of the public health and welfare. All testing shall be conducted in accordance with an approved testing protocol.

Except as otherwise specified in these Permit Conditions or by the Control Officer, required testing used to determine compliance with standards or permit conditions established pursuant to the County or SIP Rules or these Permit Conditions shall be conducted in accordance with County Rule 270 and the applicable testing procedures contained in the Arizona Testing Manual for Air Pollutant Emissions or other approved USEPA test methods.

[County Rule 200 §408 & County Rule 270]

The measurement methods for sulfur content shall be either ASTM Method D1072-80, ASTM Method D3246-81, 92 or 96 or ASTM Method D4084-82 or 94

The measurement methods for Particulate Matter content shall be either EPA Reference Method 5 ("Determination of Particulate Emissions from Stationary Sources") (40 CFR 60, Appendix A), EPA Reference Method 201A ("Constant Sampling Rate Procedure") (40 CFR 60 Appendix A), or an equivalent EPA Method approved by the Control Officer, and possibly, if requested by the Control Officer, EPA Reference Method 202 ("Determination of Condensable Particulate Emissions from Stationary Sources") (40 CFR 51, Appendix M).

The measurement methods for Total Dissolved Solids shall be Standard Methods for the Examination of Water and Wastewater, "Dissolved Solids Dried at 180° C, Method # 2540 C", American Public Health Association, 19th edition 1995.

The measurement methods for Conductivity shall be Standard Methods for the Examination of Water and Wastewater, "Conductivity – Laboratory Method, Method # 2510 B", American Public Health Association, 19th. Edition 1995.

The measurement methods for VOC at CC4 shall be EPA Reference Method 25A "Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer" (40 CFR 60 Appendix A).

23. OTHER

A. PERMIT SHIELD:

Compliance with the conditions of this Permit shall be deemed compliance with the applicable requirements identified in Appendix B of this Permit. The Permit Shield shall not extend to minor permit revisions.

[County Rule 210 §§405.7 and 407]

B. COMMENCEMENT OF CONSTRUCTION:

The facility shall commence construction as defined in County Rule 100 §232 within 18 months of the effective date of this Permit. If construction is not commenced within 18 months, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, this Permit shall become invalid. The Control Officer shall terminate this Permit if construction is not begun within 18 months or if construction is suspended for more than 18 months.

[40 CFR 52.21(r)(2)] [County Rule 240 §304.4]

C. ACID RAIN PERMIT:

- 1) The Acid Rain Phase II Permit Application and Certificate of Representation signed by the Designated Representative and submitted to the Control Officer, shall constitute the Permittee's Acid Rain Permit.
- 2) The Permittee shall comply with the Acid Rain Permit, 40 CFR Parts 72, 73, and 75, and the Acid Rain requirements of Permit Condition 6.A.
- 3) The relevant Conditions of this Permit and the Acid Rain Permit, including but not limited to, the Allowable Emission Limits, Operation Requirements, Monitoring/Recordkeeping Requirements, Reporting Requirements, and Testing Requirements shall constitute the Compliance Plan required by 40 CFR Part 72 Subpart D.
- 4) The Permittee shall hold SO₂ Allowances as of the allowance transfer deadline in each Combined Cycle System compliance subaccount not less than the total annual actual emissions of SO₂ for the previous calendar year from each combined Cycle System as required by the Acid Rain Program.
- 5) The SO₂ Allowance Allocations and NO_x Requirements for each Combined Cycle System are as follows:

Affected Units	Pollutant	Years 2000 - 2009	Years 2010 and thereafter
4	SO2	11	9
6	SO2	22	15
CC4	SO2	NA	NA
CC5	SO2	NA	NA

NA means no allocations are available since these are new units.

[40 CFR 72, 73, and 75]

An Acid Rain Retired Unit exemption is currently established for West Phoenix units 4 and 6.

None of these units are subject to a NO_x limit pursuant to 40 CFR Part 76.

24. PERMIT CONDITIONS FOR ARCHITECTURAL COATINGS

A. OPERATIONAL LIMITATIONS / STANDARDS:

- 1) The Permittee shall limit the volatile organic compound (VOC) content of architectural coatings as follows:
 - a) Pavement Sealer: [County Rule 335 §301][SIP Rule 335 §301]
 The Permittee shall not apply any architectural coating manufactured after July 13, 1988, which is recommended for use as a bituminous pavement sealer unless it is an emulsion type coating.
 - b) Non-Flat Architectural Coating: [County Rule 335 §302][SIP Rule 335 §302]
 The Permittee shall not apply any non-flat architectural coating manufactured after July 13, 1990, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed below.
 - c) Flat Architectural Coating: [County Rule 335 §304][SIP Rule 335 §304]
 The Permittee shall not apply any flat architectural coating manufactured after July 13, 1989, which contains more than 2.1 lbs (250 g/l) of volatile organic compounds per gallon of coating, excluding water and any colorant added to tint bases. These limits do not apply to specialty coatings listed below.
 - d) Specialty Coatings: [County Rule 335 §305][SIP Rule 335 §305]
 The Permittee shall not apply any architectural coating that exceeds the following limits. The limits are expressed in pounds of VOC per gallon of coating as applied, excluding water and any colorant added to tint bases.

<u>COATING</u>	<u>(lb/gal)</u>
Concrete Curing Compounds	2.9
Dry Fog Coating	
Flat	3.5
Non-flat	3.3
Enamel Undercoaters	2.9
General Primers, Sealers and Undercoaters	2.9
Industrial Maintenance Primers and Topcoats	
Alkyds	3.5
Catalyzed Epoxy	3.5
Bituminous Coating Materials	3.5
Inorganic Polymers	3.5
Vinyl Chloride Polymers	3.5
Chlorinated Rubbers	3.5
Acrylic Polymers	3.5
Urethane Polymers	3.5
Silicones	3.5
Unique Vehicles	3.5
Lacquers	5.7

Opaque Stains	2.9
Wood Preservatives	2.9
Quick Dry Enamels	3.3
Roof Coatings	2.5
Semi-transparent Stains	2.9
Semi-transparent and Clear Wood Preservatives	2.9
Opaque Wood Preservatives	2.9
Specialty Flat Products	3.3
Specialty Primers, Sealers & Undercoaters	2.9
Stains, All	2.9
Traffic Coatings	
Applied to Public Streets and Highways	2.1
Applied to other Surfaces	2.1
Black Traffic Coatings	2.1
Varnishes	2.9
Waterproof Mastic Coating	2.5
Wood Preservatives Except Below Ground	2.9

- e) Exemptions: [County Rule 335 §§306, 307][SIP Rule 335 §§306, 307]
 The VOC content requirement of this Permit Condition shall not apply to the following:
- (1) Architectural coatings supplied in containers having capacities of one quart or less.
 - (2) Architectural coatings recommended by the manufacturer for use solely as one or more of the following:
 - (a) Below ground wood preservative coatings.
 - (b) Bond breakers.
 - (c) Fire retardant coatings.
 - (d) Graphic arts coatings (sign paints)
 - (e) Mastic texture coatings.
 - (f) Metallic pigmented coatings.
 - (g) Multi-colored paints.
 - (h) Quick-dry primers, sealers and undercoaters.
 - (i) Shellacs.
 - (j) Swimming pool paints.
 - (k) Tile-like glaze coatings.

B. RECORDKEEPING: [County Rule 210 §302.1.c.] [County Rule 210 §302.1.e.]
 The Permittee shall keep a material list of all coatings used. The material list shall contain name of each coating, short description of the material, pounds of VOCs per gallon of coating, excluding water and colorant added to tint bases and amount used. If the coating is exempt from the volatile organic compounds content requirements, the justification for the determination shall be documented and kept on file.

C. REPORTING: [County Rule 210 §302.1.e.]
 The Permittee shall include the following in the semiannual compliance report.

- 1) The report shall contain a material list showing VOC content of each in lb/gallon or grams/liter.
- 2) The report being sent to Division with attention to: Large Sources Compliance Supervisor shall contain a material list and a list of the coatings which are exempt from the volatile organic compounds content requirements.

D. TESTING:

[County Rule 335 §500][SIP Rule 335 §500]

If required by the Control Officer testing procedures to determine compliance with prescribed VOC limits shall be consistent with Reference Methods 24 and 24A in the Arizona Testing Manual for Air Pollutant Emissions.

25. PERMIT CONDITIONS FOR NON-RESALE GASOLINE STORAGE TANKS WITH CAPACITY GREATER THAN 250 GALLONS AND GASOLINE THROUGHPUT LESS THAN 120,000 GALLONS PER YEAR:

A. OPERATIONAL LIMITATIONS/STANDARDS:

- 1) The Permittee shall limit gasoline deliveries to less than 120,000 gallons in any 12 consecutive calendar months.

[County Rule 353 §305.2][SIP 353 §303.2]

- 2) For any storage tank with a capacity of more than 250 gallons, the Permittee shall not allow vapor or liquid escapes through a dispensing tank's outer surfaces, nor from any of the joints where the tank is connected to pipe(s), wires, or other system.

[County Rule 353 §301][SIP 353 §301]

- 3) Each fill-line into a stationary dispensing tank shall be equipped with a permanent submerged fill pipe that has a discharge opening which is completely submerged when the liquid level is 6 inches above the tank bottom.

[County Rule 353 §302][SIP 353 §301.1]

B. MONITORING/RECORDKEEPING:

[County Rule 210 §302.1 c. (2)]

[County Rule 353 §502][SIP 353 §502]

- 1)The Permittee shall maintain accurate records showing the quantity of all gasoline delivered to the facility. The records will include total gasoline received each month and the 12 month rolling total.
- 2)The Permittee shall conduct and record an inspection each time the submerged fill pipe is reinstalled. This inspection will be performed to monitor compliance with the file pipe length requirements of these permit conditions. The records shall indicate each fill pipe removal date of replacement and the date and result of the follow up inspection.

C. REPORTING:

[County Rule 210 §302.1 e. (1)]

The Permittee shall include the following in each Semi-annual compliance report:

- 1) a summary of the monthly and 12-month rolling total gasoline delivery records; and
- 2) date of fill pipe reinstallation and result of follow up inspection.

- D. TESTING METHODS:** If testing is required by the Control Officer the applicable testing procedures contained in County Rule 353 §§ 503 and 504 shall be used.

[County Rule 353 §§503, 504]

26. PERMIT CONDITIONS FOR DUST GENERATING OPERATIONS:

- A. Dust Control Plan Required: The Permittee shall submit a Dust Control Plan and obtain the Control Officer's approval of the Dust Control Plan, before commencing any routine dust generating operation. The Dust Control Plan shall include all the information contained in County Rule 310, Section 304 and shall describe all control measures to be implemented before, after, and while conducting any dust generating operation, including during weekends, after work hours, and on holidays. Any control measure that is implemented must meet the applicable standards described in these permit conditions, as determined by the corresponding test method(s), as applicable, and must meet other applicable standards set forth in County Rule 310.

[County Rule 310 §303 and 303.3(b)] [SIP Rule 310 §303 and 303.3(b)]

Failure to comply with the provisions of an approved Dust Control Plan is deemed to be a violation of this Permit. Regardless of whether an approved Dust Control Plan is in place or not, the Permittee is still subject to all requirements of these permit conditions at all times. In addition, the Permittee with an approved Dust Control Plan is still subject to all of the requirements of these permit conditions, even if the Permittee is complying with the approved Dust Control Plan.

[County Rule 310 §303.1] [SIP Rule 310 §303.1]

If the Control Officer determines that an approved Dust Control Plan has been followed, yet fugitive dust emissions from any given fugitive dust source still exceed limits from this permit condition, then the Permittee shall make written revisions to the Dust Control Plan and shall submit such revised Dust Control Plan to the Control Officer within three working days of receipt of the Control Officer's written notice, unless such time period is extended by the Control Officer, upon request, for good cause. During the time that the Permittee is preparing revisions to the approved Dust Control Plan, the Permittee must still comply with all requirements of these permit conditions.

[County Rule 310 §305] [SIP Rule 310 §305]

- B. Allowable Emissions: The Permittee shall not cause, suffer, allow, or engage in any dust generating or other operation which causes fugitive dust emissions exceeding 20% opacity, even during a wind event (i.e., during wind speeds of 25 mph or greater). Exceedances of the opacity limit that occur due to a wind event shall constitute a violation of the opacity limit. However, it shall be an affirmative defense in an enforcement action if the Permittee demonstrates all of the following conditions:

- 1) All control measures required were followed and one or more of the control measures listed below were applied and maintained;
 - a) Cease dust generating operations for the duration of the condition/situation/event when the 60-minute average wind speed is greater than 25 miles per hour. If dust generating operations are ceased for the remainder of the work day, stabilization measures must be implemented; or
 - b) Apply water or other suitable dust suppressant twice per hour for non-attainment; or
 - c) Apply water as necessary to maintain a soil moisture content at a minimum of 12% as determined by ASTM Method D2216-98 or other equivalent as approved by the Control

Officer and the Administer of EPA. For areas which have an optimum moisture content for compaction of less than 12% as determined by ASTM Method D1557-91(1998) or other equivalent as approved by the Control Officer and the Administer of EPA, maintain at least 70% of the optimum soil moisture content.

- 2) The 20% opacity exceedance could not have been prevented by better application, implementation, operation, or maintenance of control measures;
- 3) The Permittee compiled and retained records, in accordance with Recordkeeping requirements of this permit; and
- 4) The occurrence of a wind event on the day(s) in question is documented by records. The occurrence of a wind event must be determined by the nearest Maricopa County Environmental Services Department Air Quality Division monitoring station, from any other certified meteorological station, or by a wind instrument that is calibrated according to manufacturer's standards and that is located at the site being checked.

[County Rule 310 §301, Table 1, and Table 2]

[SIP Rule 310 §301, Table 1, and Table 2]

C. Operational Limitations:

- 1) Unpaved Access Road: The Permittee shall not allow fugitive dust emissions to exceed 20% opacity from unpaved access roads and:
 - a) Shall not allow silt loading equal to or greater than 0.33 oz/ft²; or
 - b) Shall not allow the silt content to exceed 6%; or
 - c) As an alternative to meeting the stabilization requirements for an unpaved access road, limit vehicle trips to no more than 20 per day and limit vehicle speeds to no more than 15 miles per hour. If complying with these permit conditions must include, in a Dust Control Plan, the number of vehicles traveled on the unpaved haul/access roads (i.e., number of employee vehicles, earthmoving equipment, haul trucks, and water trucks).

[County Rule 310 §302.2] [SIP Rule 310 §302.2]

- 2) Open Area Or Disturbed Surface Area: The Permittee on any disturbed surface area on which no activity is occurring shall meet at least one of the standards described below, as applicable. The Permittee shall be considered in violation of this permit if such inactive disturbed surface area is not maintained in a manner that meets at least one of the standards described below, as applicable.
 - a) Maintain a visible crust; or
 - b) Maintain a threshold friction velocity (TFV) for disturbed surface areas corrected for non-erodible elements of 100 cm/second or higher; or
 - c) Maintain a flat vegetative cover (i.e., attached (rooted) vegetation or unattached vegetative debris lying on the surface with a predominant horizontal orientation that is not subject to movement by wind) that is equal to at least 50%; or
 - d) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 30%; or
 - e) Maintain a standing vegetative cover (i.e., vegetation that is attached (rooted) with a predominant vertical orientation) that is equal to or greater than 10% and where the threshold

friction velocity is equal to or greater than 43 cm/second when corrected for non-erodible elements; or

- f) Maintain a percent cover that is equal to or greater than 10% for non-erodible elements; or
- g) Comply with a standard of an alternative test method, upon obtaining the written approval from the Control Officer and the Administrator of the Environmental Protection Agency (EPA).

[County Rule 310 §302.3] [SIP Rule 310 §302.3]

- 3) **Weed Abatement By Discing Or Blading:** When engaged in weed abatement, the Permittee shall comply with the following work practices. Such work practices shall be implemented to meet the standards described in this permit condition.

- a) Apply water before weed abatement by discing or blading occurs; and
- b) Apply water while weed abatement by discing or blading is occurring; and
- c) Pave, apply gravel, apply water, or apply a suitable dust suppressant, in compliance with these permit conditions, after weed abatement by discing or blading occurs; or
- d) Establish vegetative ground cover in sufficient quantity, in compliance with these permit conditions, after weed abatement by discing or blading occurs.

[County Rule 310 §308.8] [SIP Rule 310 §308.8]

- 4) The Permittee shall not allow or engage in the following on a routine basis:
 - a) Unpaved parking lots;
 - b) Vehicle use in open areas;
 - c) Bulk material transport, hauling, handling and open storage piles;
 - d) Placement of bulk material onto paved surfaces; and
 - e) Earthmoving operations on disturbed surface areas one acre or greater. (Earthmoving activities associated with construction may be conducted after a separate earthmoving permit is obtained from the Control Officer)

[County Rule 210 §302.1.b(1)] [SIP Rule 210 §302.1.b(1)]

D. Recordkeeping/Monitoring:

If the Permittee is required to submit and obtain approval of a Dust Control Plan, the Permittee shall keep a daily written log recording the actual application or implementation of the control measures delineated in the approved Dust Control Plan. The log or the records and supporting documentation shall be made available to the Control Officer within 48 hours, excluding weekends, from written or verbal request. If the Control Officer is at the site where requested records are kept, records shall be provided without delay.

[County Rule 310 §502] [SIP Rule 310 §502]

Copies of approved Dust Control Plans, control measures implementation records, and all supporting documentation shall be retained at least five years from the date such records are established.

[County Rule 310 §503] [SIP Rule 310 §503]

E. Testing:

The following test methods shall be used as appropriate.

- 1) **Opacity Observations:**

- a) Dust Generating Operations: Opacity observations of a source engaging in dust generating operations shall be conducted in accordance with County Rules Appendix C, Section 3 (Visual Determination Of Opacity Of Emissions From Sources For Time-Averaged Regulations) of County Rule 310, except opacity observations for intermittent sources shall require 12 rather than 24 consecutive readings at 15-second intervals for the averaging time.
[County Rule 310 §501.1(a), County Rules Appendix C Section 3]
[SIP Rule 310 §501.1(a), Appendix C Section 3]
 - b) Unpaved Access Road: Opacity observations of any unpaved access road shall be conducted in accordance with County Rules Appendix C, Section 2.1 (Test Methods For Stabilization-For Unpaved Roads And Unpaved Parking Lots) of County Rule 310.
[County Rule 310 §501.1(c), County Rules Appendix C Section 2]
[SIP Rule 310 §501.1(c), Appendix C Section 2]
- 2) Stabilization Observations:
- a) Unpaved Access Road: Stabilization observations for unpaved access roads shall be conducted in accordance with County Rules Appendix C, Section 2.1 (Test Methods For Stabilization-For Unpaved Roads And Unpaved Parking Lots) of County Rule 310. When more than one test method is permitted for a determination, an exceedance of the limits established in this permit determined by any of the applicable test methods constitutes a violation of these Permit conditions.
[County Rule 310 §501.2(b), County Rules Appendix C Section 2]
[SIP Rule 310 §501.2(b), Appendix C Section 2]
 - b) Open Area Or Disturbed Surface Area: Stabilization observations for an open area and vacant lot or any disturbed surface area on which no activity is occurring (whether at a work site that is under construction, at a work site that is temporarily or permanently inactive) shall be conducted in accordance with at least one of the techniques described in County Rule 310 subsection 501.2(c), as applicable. The Permittee shall be considered in violation of this permit if such inactive disturbed surface area is not maintained in a manner that meets at least one of the standards described in County Rule 310 subsection 302.3, as applicable.
[County Rule 310 §501.2(c)] [SIP Rule 310 §501.2(c)]
- 3) Silt and Soil Moisture Content Methods: The test methods listed in this section are adopted by reference. These adoptions by reference include no future editions or amendments:
- a) ASTM Method C136-96a (“Standard Test Method For Sieve Analysis Of Fine And Coarse Aggregates”).
 - b) ASTM Method D2216-98 (“Standard Test Method For Laboratory Determination Of Water (Moisture) Content Of Soil And Rock By Mass”).
 - c) ASTM Method 1557-91(1998) (“Test Method For Laboratory Compaction Characteristics Of Soil Using Modified Effort (56,000 ft-lb/ft³ (2,700 kN-m/m³))”).
[County Rule 310 §504] [SIP Rule 310 §504]

27. PERMIT CONDITIONS FOR SURFACE COATING OPERATIONS

A. OPERATIONAL LIMITATIONS AND STANDARDS:

The Permittee shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met:

- 1) Should the Permittee operate spray coating equipment outside of a building, the Permittee shall operate all spray coating equipment inside an enclosure which has at least three sides a minimum of eight feet in height and able to contain any object(s) being coated.
 - a) For three-sided enclosures, the Permittee shall direct the spray in a horizontal or downward pointing manner so that overspray is directed at the walls or floor of the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of the top of the enclosure.
 - b) For enclosures with three sides and a roof, or for complete enclosures, the Permittee shall direct the spray into the enclosure so that the overspray is directed away from any opening in the enclosure. No spraying shall be conducted within three feet of any open end and/or within two feet of any open top of the enclosure.

[County Rule 315 § 301.1]

- 2) The Permittee shall install and operate a filtering system on any spray booth or enclosure with forced air exhaust.
 - a) The filtering system shall have an average overspray removal efficiency of at least 92% by weight, as certified in writing by the manufacturer, for the type of material being sprayed.
 - b) No gaps, sags or holes shall be present in the filters and all exhaust must be discharged into the atmosphere.

[County Rule 315 § 301.2]

The Permittee shall be exempt from Subsection A of this Permit Condition if the spray coating operation is one of the following:

- 1) Spray coating of buildings or dwellings, including appurtenances and any other ornamental objects that are not normally removed prior to coating;
- 2) Spray coating of facility equipment or structures which are fixed in a permanent location and cannot easily be moved into an enclosure or spray booth and which are not normally dismantled or moved prior to coating;
- 3) Spray coating of objects which cannot fit inside of an enclosure with internal dimensions of 10'W x 25'L x 8'H;
- 4) Enclosures and spray booths and exhausts located entirely in a completely enclosed building, providing that any vents or openings do not allow overspray to be emitted into the outside air; or
- 5) Coating operations utilizing only hand-held aerosol cans.

[County Rule 315 § 302]

B. MONITORING/RECORDKEEPING:

[County Rule 210 § 302.1 c]

- 1) The Permittee shall inspect each filter installed on a spray booth or enclosure, for gaps, sags or holes once per week.
 - a) Should the Permittee observe any gaps, sags or holes in any of the filters, the Permittee shall immediately repair or replace the filter and record the name of the inspector, the location of filtering system containing the filter (if more than one spray booth), and the time and date that the filter was replaced.
 - b) If no gaps, sags or holes are observed in any of the filters, the Permittee shall record the name of the inspector, the location of the filtering system containing the filter (if more than one spray booth), and the time and date that the filter was inspected.
- 2) The Permittee shall inspect the facility for evidence of any spraying activity that occurred outside of the spray booth once per week.
- 3) Record Keeping Requirements: The Permittee shall maintain on file and make available to the Control Officer upon request, a copy of the manufacturer's specifications verifying that the average overspray removal efficiency for the filter is at least 92%.

[County Rule 210 § 302.1.d]

C. REPORTING CONDITIONS

[County Rule 210 §302.1 e. (1)]

For the purposes of the semi-annual compliance certification, the Permittee shall provide the following information:

If the Permittee operates all spray coating equipment inside an enclosure without fixed air exhaust, the Permittee shall provide a statement certifying the following:

- 1) That the enclosure has at least three sides that are a minimum of eight feet in height;
- 2) That no spraying was conducted within three feet of any open end, or within two feet of any open top of the enclosure; and
- 3) That the spray is directed in a horizontal or downward pointing manner for three-sided enclosures, or away from any opening for complete enclosures and three-sided enclosures with roofs.

If the Permittee operates all spray coating equipment with a filtering system on a spray booth or enclosure with forced air exhaust, the Permittee shall provide a statement certifying the following:

- 1) That each filter installed on a spray booth or enclosure was inspected for gaps, sags or holes once every two weeks;
- 2) That all filters that were observed to have gaps, sags or holes were immediately replaced; and

- 3) Details of the make and manufacturer of each filter used as well as its overspray control efficiency.

The Permittee shall provide a statement certifying that no spraying occurred outside of the paint booths. If evidence of spraying outside of the booth was found, the Permittee shall instead submit a statement detailing any corrective action taken in order to ensure that future spraying occurs inside the spray booth.

28. PERMIT CONDITIONS FOR THE SOLVENT CLEANING:

A. OPERATIONAL LIMITATIONS/STANDARDS:

ALL CLEANING MACHINES SHALL BE ONE OF THE FOLLOWING TYPES:

- 1) Batch loaded cold cleaners with remote reservoir;
- 2) Batch loaded cold cleaners without a remote reservoir (such as solvent dip tank);
- 3) Shall use only low VOC cleaner (A low VOC cleaner is any solution or homogeneous suspension that, as used, contains less than 50 grams of VOC per liter of material (0.42 lb VOC/gal) or is at least 95% water by weight or volume as determined by an applicable test method in Section 502 of County Rule 331); OR
- 4) A sealed system. A sealed system is one that meets all of the following requirements:
 - a) Is an airtight or airless cleaning system which is operated according to the manufacturer's specifications and, unless otherwise indicated by the manufacturer, meets all of the following requirements:
 - b) Has a door or other pressure-sealing apparatus that is shut during each cleaning and drying cycle.
 - c) Has a differential pressure gauge that always indicates the pressure in the sealed chamber when occupied or in active use.
 - d) Any associated pressure relief device(s) shall be so designed and operated as to prevent liquid cleaning-solvents from draining out.

[County Rule 210 §302.1]

SOLVENT HANDLING REQUIREMENTS:

- 5) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leakfree containers that are opened only when adding or removing material. Each container shall be clearly labeled with its contents.
- 6) If an cleaning-solvent escapes from a container:
 - a) Wipe up or otherwise remove immediately if in accessible areas.

- b) For areas where access is not feasible during normal production, remove as soon as reasonably possible.
- 7) Unless records show that BOC-containing cleaning material was sent offsite for legal disposal, it will be assumed that it evaporated on site.

[County Rule 331 §301]

EQUIPMENT REQUIREMENTS FOR ALL CLEANING MACHINES:

- 8) The Permittee shall provide a leakfree container (degreaser) for the solvents and the articles being cleaned.
 - a) The VOC-containment portion shall be impervious to VOC-containing liquid and vapors.
 - b) No surface of any freeboard required by these permit conditions shall have an opening or duct through which VOC can escape to the atmosphere except as required by OSHA.
- 9) The Permittee shall maintain and operate all cleaning machine equipment required by these permit conditions and any of its emission controls required by this rule.
- 10) The Permittee shall not dispose of any solvent, including waste solvent, in such a manner as will cause or allow its evaporation into the atmosphere. Records of its disposal/recovery shall be kept in accordance with hazardous waste disposal statutes.

[County Rule 331 §302.1][SIP Rule 331 §301]

[County Rule 331 §302.2][SIP Rule 331 §306.1]

[SIP Rule 331 §306.4]

SPECIFIC OPERATING & SIGNAGE REQUIREMENTS FOR CLEANING MACHINES

- 11) The Permittee shall conform to the following operating requirements when cleaning with cleaning-solvents other than Low-VOC Cleaners:
 - a) Comfort fans shall not be used near cleaning machines;
 - b) Do not remove any device designed to cover the solvent unless processing work in the cleaning machine or maintaining the machine;
 - c) Drain cleaned parts for at least (15) fifteen seconds after cleaning or until dripping ceases, whichever is later;
 - d) If using a cleaning-solvent spray system:
 - (1) Use only a continuous, undivided stream (not a fine, atomized, or shower type spray).
 - (2) Pressure at the orifice from which the solvent emerges shall not exceed (10) ten psig and shall not cause liquid solvent to splash outside the solvent container.

- (3) In an in-line cleaning machine, a shower-type spray is allowed, provided that the spraying is conducted in a totally confined space that is separated from the environment.
- (4) Exceptions to the foregoing subsections 1), 2), and 3) are provided for in Special Non-vapor Cleaning Situations in the section titled the same below.
- e) The Permittee shall not cause agitation of a cleaning-solvent in a cleaning machine by sparging with air or other gas. Covers shall be placed over ultrasonic cleaners when the cleaning cycle exceeds (15) fifteen seconds;
- f) The Permittee shall not place porous or absorbent materials in or on a cleaning machine. This includes, but is not limited to, cloth, leather, wood, and rope. No object with a sealed wood handle, including a brush, is allowed;
- g) The ventilation rate at the cleaning machine shall not exceed 65 cfm per square foot of evaporative surface ($20 \text{ m}^3/\text{min}/\text{m}^2$), unless that rate must be changed to meet a standard specified and certified by a Certified Safety Professional, a Certified Industrial Hygienist, or a licensed professional engineer experienced in ventilation, to meet health and safety requirements;
- h) Limit the vertical speed of mechanical hoists moving parts in and out of the cleaning machine to a maximum of 2.2 inches per second and (11) eleven ft/min (3.3 m/min);
- i) The Permittee shall prevent cross contamination of solvents regulated by Section 304 of Rule 331 with solvents that are not so regulated. Use signs, separated work-areas, or other effective means for this purpose. This includes those spray gun cleaning solvents that are regulated by another rule.

[County Rule 331 §303.1][SIP Rule 331 §306]

- 12) When using cleaning-solvent, other than Low-VOC Cleaner, in any solvent cleaning machine (degreaser) or dip tank, the Permittee shall provide the following signage requirements on the machine, or within 3¼ feet (1 meter) of the machine, a permanent, conspicuous label, or placard which includes, at a minimum, each of the following applicable instructions, or its equivalent:
- a) "Keep cover closed when parts are not being handled." (This is not required for remote reservoir cleaners.)
 - b) "Drain parts until they can be removed without dripping."
 - c) "Do not blow off parts before they have stopped dripping."
 - d) "Wipe up spills and drips as soon as possible; store used spill rags [or 'wiping material'] in covered container."
 - e) "Don't leave cloth or any absorbent materials in or on this tank."

- f) For cleaning machines with moving parts such as hoists, pumps, or conveyors, post:
"Operating instructions can be obtained from _____" where the Permittee shall list a person
or place where the instructions are available.

[County Rule 331 §303.2][SIP Rule 331 §306]

SOLVENT SPECIFICATION

- 13) All cleaning solvents, except Low-VOC Cleaners, shall be conforming solvents. A conforming solvent is one which has a total VOC vapor pressure at 68°F (20°C) not exceeding (2) two millimeters of mercury column maximum total VOC vapor pressure through October 31, 2001; or 1 millimeter of mercury column maximum total VOC vapor pressure from November 1, 2001 and thereafter.

- 14) A nonconforming solvent may be used if it is utilized in a sealed system.

[County Rule 331 §304]

BATCH CLEANING MACHINES

- 15) The Permittee shall equip each batch cleaning machine with remote reservoir, including the cabinet type(s), with the following:

- a) A sink-like work area or basin which is sloped sufficiently towards the drain so as to prevent pooling of cleaning-solvent.
- b) A single, unimpeded drain opening or cluster of openings served by a single drain for the cleaning-solvent to flow from the sink into the enclosed reservoir. Such opening(s) shall be contained within a contiguous area not larger than 15.5 square inches (100 cm²).
- c) Provide a means for drainage of cleaned parts such that the drained solvent is returned to the cleaning machine.

[County Rule 331 §305.1][SIP Rule 331 §302.1]

- 16) The Permittee shall equip each batch cleaning machine without a remote reservoir with all of the following:

- a) Have and use an internal drainage rack or other assembly that confines within the freeboard all cleaning-solvent dripping from parts and returns it to the hold of the cleaning machine (degreaser).
- b) Have an impervious cover which when closed prevents cleaning-solvent vapors in the cleaning machine from escaping into the air/atmosphere when not processing work in the cleaning machine. The cover shall be fitted so that in its closed position the cover is between the cleaning-solvent and any lip exhaust or other safety vent, except that such position of cover and venting may be altered by an operator for valid concerns of flammability established in writing and certified to by a Certified Safety Professional or a Certified Industrial Hygienist to meet health and safety requirements.

- c) The freeboard height shall be not less than 6 inches (15.2 cm). Freeboard height for batch cleaning machines is the vertical distance from the solvent/air interface to the least elevated point of the top-rim when the cover is open or removed, measured during idling mode.
- d) The freeboard zone shall have a permanent, conspicuous mark that locates the maximum allowable solvent level which conforms to the applicable freeboard requirements.
[County Rule 331 §305.2][SIP Rule 331 §302.2]

SPECIAL NON-VAPOR CLEANING SITUATIONS

17)The Permittee shall operate and equip the devices as follows when blasting or misting with conforming solvents;

- a) The device shall have internal drainage, a reservoir or sump, and a completely enclosed cleaning chamber, designed so as to prevent any perceptible liquid from emerging from the device; and
- b) The device shall be operated such that there is no perceptible leakage from the device except for incidental drops from drained, removed parts.

[County Rule 331 §307.1]

18)The Permittee shall use a sealed system for all blasting or misting with a non-conforming solvent.

[County Rule 331 §307.2]

19)Cleaning systems using cleaning-solvent that emerges from an object undergoing flushing with a visible mist or at a pressure exceeding 10 psig, shall comply as follows;

- a) For conforming solvents, use a containment system that is designed to prevent any perceptible cleaning-solvent liquid from becoming airborne outside the containment system, such as a completely enclosed chamber.
- b) Use a sealed system for non-conforming solvents.

[County Rule 331 §307.3]

B. MONITORING/RECORDKEEPING:

- 1) The Permittee shall maintain a current list of cleaning-solvents; state the VOC-content of each in pounds VOC per gallon of material or grams per liter of material.
- 2) The Permittee shall record the amount of cleaning-solvent used at the end of each month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent.
- 3) Annually the Permittee shall document the use of concentrate that is used only in the formulation of Low VOC Cleaner.
- 4) Annually the Permittee may, for purposes of recording usage, give cleaning-solvents of similar VOC content a single group-name, distinct from any product names in the group. The total usage of all products in that group are then recorded under just one name. (In such case the Permittee

shall also keep a separate list that identifies the product names of the particular solvents included under the group name.) To the group name shall be assigned the highest VOC content among the members of that group, rounded to the nearest 10th of a pound of VOC per gallon of material, or to the nearest gram VOC per liter of material.

[County Rule 331 §501][SIP Rule 331 §501]

C. REPORTING:

The Permittee shall include the following information in each semiannual compliance report;

- 1) certification that the operational requirements, specifically applicable to the Permittee's type of cleaning, continue to be in compliance;
- 2) a summary of the listed cleaning-solvents currently used at the facility and state the VOC-content of each in VOC per gallon of material or grams per liter of material;
- 3) certification that monthly and annual recordkeeping was performed as directed in the monitoring/recordkeeping requirements above; and
- 4) a summary of any testing that may have been performed during the period.

[County Rule 210 302.1.e.(1)]

D. TESTING (if applicable):

- 1) As required by the Control Officer, the VOC content of solutions, dispersions, emulsions, and conforming solvents shall be determined by one of the following methods:
 - a) South Coast Air Quality Management District Method 313-91;
 - b) Bay Area Air Quality Management District Method 31;
 - c) Solids-free solutions, in which all organic components are VOCs, may be tested using Maricopa County Reference Method #100, "Total Organic Carbon for Windshield Washer Fluids", Maricopa County Air Pollution Control Rule 344 (April 7, 1999).
- 2) Within 60 days of permit issuance, the Permittee shall determine the VOC content of gaseous emissions entering and exiting the ECS by either EPA Method 18 or Method 25 or its sub-method.
- 3) Within 60 days of permit issuance, the Permittee shall determine the capture efficiency of the emission control device used by either using EPA Method 204 and its sub-methods, or by using mass balance calculation methods in concert with EPA Methods 2, 2a, 2c, and 2d.

[County Rule 331 §502][SIP Rule 331 §502]

29. WIPE CLEANING

A. OPERATIONAL LIMITATIONS/STANDARDS:

- 1) All cleaning-solvent, including solvent soaked materials, shall be kept in closed leakfree containers that are opened only when adding or removing materials. Rags used for wipe cleaning shall be stored in closed containers when not in use. Each container shall be clearly labeled with its contents.

[County Rule 331 §301.1] [SIP 331 §301]

- 2) If any cleaning-solvent escapes from a container, the Permittee shall wipe up or other wise remove immediately if in accessible areas and for areas where access is not feasible during normal production, remove as soon as reasonably possible.

[County Rule 331 §301.2]

B. MONITORING/RECORDKEEPING:

The Permittee shall maintain:

- 1) A current list of coatings, adhesives, makeup solvents, and any other VOC-containing materials; state the VOC content of each in pounds per gallon or grams per liter.

[County Rule 331 §501.1 a][SIP 331 §501]

- 2) Monthly records of the amount of each cleaning-solvent used shall be updated by the end of month for the previous month. Show the type and amount of each make-up and all other cleaning-solvent to which these permit conditions are applicable.

[County Rule 331 §501.2 a][SIP 331 §501]

C. REPORTING:

The Permittee shall include the following information in each semi-annual compliance report;

- 1) a summary of the listed cleaning-solvents currently used at the facility and state the VOC-content of each in pound per gallon of material or grams per liter of material;
- 2) the quantity of each cleaning solvent used during the reporting period;
- 3) certify that monthly recordkeeping was performed as directed in the monitoring/recordkeeping requirement #2 above; and
- 4) any new or updated material safety data sheets (MSDS) that may have been obtained during the period.

[County Rule 210 302.1.e.(1)]

30. PERMIT CONDITIONS FOR CUTBACK AND EMULSIFIED ASPHALT:

A. OPERATIONAL LIMITATIONS

- 1) The VOC content of asphalt materials shall be limited as follows:
 - a) The Permittee shall not use or apply the following materials for paving, construction, or maintenance of highways, streets, driveways, parking lots, roads, nor shall they be applied onto soil and earthworks:
 - (1) Rapid cure cutback asphalt.
 - (2) Any cutback asphalt material, road oils, or tar which contains more than 0.5 percent by volume VOCs which evaporate at 500°F (260°C) or less using ASTM Test Method D 402-76.
 - (3) Any emulsified asphalt or emulsified tar containing more than 3.0 percent by volume VOCs which evaporate at 500°F (260°C) or less as determined by ASTM Method D 244-89.

[County Rule 340 §301] [SIP Rule 340 §301]

- b) The Permittee shall not store for use any emulsified or cutback asphalt product which contains more than 0.5 percent by volume solvent-VOC unless such

material lot includes a designation of solvent-VOC content on data sheet(s) expressed in percent solvent-VOC by volume.

[County Rule 340 §303] [SIP Rule 340 §303]

- 2) The VOC content limitations of this Permit Condition do not apply to the following:
- a) Asphalt that is used solely as a penetrating prime coat and which is not a rapid cure cutback asphalt. Penetrating prime coats do not include dust palliatives or tack coats.

[County 340 §302.1] [SIP Rule 340 §302.1]

- b) The Permittee may use up to 3.0 percent solvent-VOC by volume for batches of asphalt rubber which cannot meet paving specifications by adding heat alone only if request is made to the Control Officer, who shall evaluate such requests on a case-by-case basis. The Permittee shall keep complete records and full information is supplied including savings realized by using discarded tires. The Permittee shall not exceed 1100 lbs (500 kg) usage of solvent-VOC in asphalt rubber in a calendar year unless the Permittee can demonstrate that in the previous 12 months no solvent-VOC has been added to at least 95 percent by weight of all the asphalt rubber binder made by the Permittee or caused to be made for the Permittee. This Permit Condition does not apply to batches which yield 0.5 percent or less solvent-VOC evaporated using the test in County Rule 340 § 502.1.

[County 340 §302.3] [SIP Rule 340 §302.3]

B. MONITORING/RECORDKEEPING

[County 340 §501] [SIP Rule 340 §501] [County Rule 210 §302.1.c.(2)]

The Permittee shall keep daily records of the amount and type of asphaltic/bituminous material containing more than 0.5 percent by volume solvent-VOCs which is used at the facility. Records must show the solvent-VOC content of this material.

Material Safety Data Sheets (MSDS) or technical data sheets shall be kept available for any asphalt materials used at the facility. Records must be maintained in a readily accessible location and must be made available to the Control Officer upon request.

C. REPORTING:

[County Rule 210 §302.1.e.(1)]

The Permittee shall include the following information in the semiannual compliance report required by these Permit Conditions:

- 1) A statement as to whether the recordkeeping requirements of these Permit Conditions relating to asphalt usage were met.
- 2) A listing of any asphalt used that exceeded the VOC content limitations of Permit Condition A. 1) of this section and whether the exceedance was covered by an exemption covered by Permit Condition A. 2) of this section or whether it was a deviation from the requirements of this Permit Condition.

D. TESTING:

[County 340 §502] [SIP Rule 340 §502]

If required by the Control Officer the applicable testing procedures contained in County Rule 340 § 502 and SIP Rule 340 § 502 shall be used to determine compliance with these Permit Conditions.

31. PERMIT CONDITIONS FOR VOLATILE ORGANIC COMPOUNDS:

The provisions of these Permit Conditions based on Rule 330 shall not apply to the use of equipment, materials, and/or substances which meet applicable requirements and standards specified by other Permit Conditions of this Permit.

[County Rule 330 § 307.2]

A. OPERATIONAL LIMITATIONS:

- 1) Excluding emissions subject to County Rule 330 § 301, the Permittee shall not discharge more than 40 pounds (18 kg) of volatile organic compounds into the atmosphere in any one day from any machine, equipment, device or other article for employing, applying, evaporating or drying any non-complying solvent (as defined in County Rule § 202) or material containing such non-complying solvent, unless the entire amount of such discharge has been reduced in accordance with County Rule 330 § 304.

[County Rule 330 § 302]

- 2) The Permittee shall not use any liquid materials containing more than 10 percent volatile organic compounds for the cleanup of equipment unless:
 - a) The used cleaning liquids are collected in a container which is closed when not in use and is disposed of in a manner such that volatile organic compounds are not emitted into the atmosphere, or
 - b) The equipment is disassembled and cleaned in a solvent vat which is closed when not in use or cleaning is done by other methods approved in writing by the Control Officer or the Administrator, which limit evaporation..

[County Rule 330 § 305.1&2]

- 3) The Permittee shall not store, discard, or dispose of VOC or VOC-containing material in a way intended to cause or to allow the evaporation of VOC to the atmosphere. Reasonable measures shall be taken to prevent such evaporation which include but are not limited to the following:
 - a) All materials from which VOC can evaporate, including fresh solvent, waste solvent and solvent-soaked rags and residues, shall be stored in closed containers when not in use; and
 - b) Such containers one gallon and larger shall be legibly labeled with their contents; and

[County Rule 330 § 306.1&2]

- 4) Determination of the organic solvent content and composition of a solvent or material shall be made as of the time that the solvent or material is in its final form for application or employment, notwithstanding any prior blending, reducing, thinning or other preparation for application or employment. Emissions resulting from air or heat drying of products for the first 12 hours after

the removal from any machine, equipment, device or other article shall be included in determining compliance with these Permit Conditions.

[County Rule 330 § 502]

B. RECORDKEEPING: The Permittee shall maintain:

- 1) A current list of coatings, adhesives, makeup solvents, and any other VOC-containing materials; state the VOC content of each in pounds per gallon or grams per liter. VOC content shall be expressed less water and non-precursor compounds for materials which are not used for cleaning or cleanup.

[County Rule 330 § 503.1]

- 2) Monthly records of the amount of each coating; adhesive; makeup solvent; solvent used for surface preparation, for cleanup, and for the removal of materials; and any other VOC-containing material used. Identify any materials subject to the emission limits in Section 301 or Section 302 of the County Rule 330 and keep separate totals for these materials.

[County Rule 330 § 503.2]

- 3) Records of the type, amount, and method of disposing of VOC-containing materials on each day of disposal.

[County Rule 330 § 503.4]

- 4) Records of the disposal/recovery of such materials. Records of hazardous waste disposal shall be kept in accordance with hazardous waste disposal statutes.

[County Rule 330 § 306.3]

E. REPORTING: The Permittee shall file a semiannual compliance report no later than April 30th, and shall report the compliance status of the source during the period between October 1st of the previous year and March 31st of the current year. The second certification shall be submitted no later than October 31st and shall report the compliance status of the source during the period between April 1st and September 30th of the current year. The initial compliance report shall reflect the compliance status of the source beginning with the date of the permit issuance. Compliance report shall include monthly records of the amount of each coating, adhesive, solvents and any other VOC-containing materials used.

[County Rule 210 § 302.1.e.(1)]

32. PERMIT CONDITIONS FOR ABRASIVE BLASTING WITHOUT BAGHOUSE:

- A. Allowable Emissions: The Permittee shall not discharge into the atmosphere from any abrasive blasting any air contaminant for a period or periods aggregating more than three minutes in any one-hour period which is a shade or density darker than 20 percent opacity.

[County Rule 312 §301] [locally enforceable only]

- B. Operational Limitations: When conducting any abrasive blasting operations, the Permittee shall utilize at least one of the following control measures:

- 1) Confined Blasting: The Permittee shall confine the blast in such a manner that the abrasive blasting is conducted in an enclosure which significantly reduces air contaminants from being

emitted to the ambient atmosphere. Such enclosures include, but are not limited to, shrouds, tanks, buildings and structures.

[County Rule 312 § 203 and 302.1] [locally enforceable only]

- 2) Wet Abrasive Blasting: The Permittee shall use compressed air as the propelling force and sufficient water to minimize the plume from the abrasive blasting.

[County Rule 312 § 206 and 302.2] [locally enforceable only]

- 3) Hydroblasting: The Permittee shall use high pressure liquid as the propelling force for the abrasive blasting.

[County Rule 312 § 204 and 302.3] [locally enforceable only]

- 4) California Air Resources Board (CARB) Certified Abrasive Blasting. The Permittee may perform dry, unconfined blasting operations provided that the Permittee meets all of the following requirements:

- a) The Permittee shall only use those abrasives that are contained in the most recent CARB certification list;
- b) The Permittee shall only perform the abrasive blasting on a metal surface;
- c) The Permittee shall only use the abrasive blasting medium one time;
- d) The Permittee shall only use CARB certified abrasive blasting media on paint that is lead free (i.e. the lead content is less than 0.1%);
- e) The Permittee shall only use CARB certified abrasive blasting media on objects that exceed 8 feet in any dimension, or if the surface that is to be blasted is situated at its permanent fixed location; and
- f) The Permittee shall not perform abrasive blasting at ground level on a surface which may be disturbed by the process and contribute to particulate emissions (e.g. unpaved ground).

[County Rule 312 § 302.4] [locally enforceable only]

- C. Monitoring: The Permittee shall conduct an observation of visible emissions once every ten (10) hours of operation in accordance with EPA Reference Method 9. This observation shall also be conducted in accordance with the following:

- 1) Emissions from unconfined blasting shall be read at the densest point of the emission after a major portion of the spent abrasives has fallen out, at a point not less than five feet, nor more than 25 feet from the impact surface from any single abrasive blasting nozzle.
- 2) Emissions from unconfined blasting employing multiple nozzles shall be judged as single source unless it can be demonstrated by the Permittee that each nozzle, evaluated separately, meets the emission standards of this rule.
- 3) Emissions from confined blasting shall be read at the densest point after the air contaminant leaves the enclosure.

[County Rules 210 §302.c.(2)] [locally enforceable only]

D. Record Keeping Requirements

- 1) The Permittee shall record the date upon which any abrasive blasting is conducted, the control measure employed, and the type and amount of solid abrasive material consumed (if applicable).
- 2) The Permittee shall record the start-up and shut-down times, as well as the duration of all abrasive blasting operations that took place during that time.
- 3) The Permittee shall maintain a rolling total of the hours of abrasive blasting that have taken place at the facility.
- 4) The Permittee shall maintain records of the name of the certified Method 9 observer as well as the time and results of the visual observations of the plume resulting from the abrasive blasting.
- 5) If the Permittee should use the CARB Certified Abrasive Blasting, the Permittee shall:
 - a) Record the name of the CARB material used in the abrasive blasting operation;
 - b) Record the location and type of surface that is undergoing abrasion;
 - c) Record the disposal method for spent abrasive media;
 - d) Record the results of any lead testing that was performed; and
 - e) Maintain a copy of the most recent CARB certification list on file and available upon request;

[County Rule 210 § 302.1.d] [locally enforceable only]

E. The Permittee shall include a summary of the following information in the semi-annual compliance report:

- 1) The total hours of abrasive blasting conducted during the six month period;
- 2) Opacity readings during external blasting;
- 3) Control measures utilized for abrasive blasting; and
- 4) The dates upon which external blasting was performed.

[County Rules 210 § 302.1.e.(1)] [locally enforceable only]

F. Testing: If there is a reason to suspect that the surface that is to be abraded is covered in lead paint and the Permittee intends to use CARB certified abrasive blasting media as the control device, the Permittee shall conduct testing to determine if the lead content of the paint is less than 0.1 percent.

[County Rule 210 § 302.c.(2)] [locally enforceable only]

APPENDIX "A"

EQUIPMENT LIST

West Phoenix Power Plant Permit Number V95-006

Electricity generating units:

Combined Cycle (CC) Units 1, 2 and 3

Three 85 mw each combined cycle units placed into commercial operation June, 1976, each consisting of:

Combustion turbine, General Electric model 7001C with a 17 stage compressor rated at 57 megawatts;

Steam Turbine, General Electric, single flow, straight condensing, non-reheat, rated at 28 mw.

Heat Recovery Steam Generator, extended-tube, forced circulation, with 146,667 kva generator.

CC3 SCR

Manufactured by Hamon Research-Cottrell, # C-0782

Combustion Units #1 & 2:

Two 55 Mw each simple cycle gas turbine generating units placed into commercial operation in 1972 (Unit #1) and 1973 (Unit #2) consisting of : Westinghouse W-501-AA Turbine (17 stage axial flow compressor, 4 stage power turbine), and Generator (air cooled 62,500kva, 13,800 stator volts, 3600 rpm).

CC5 – each turbine – 1,808 MMBtu/hr heat input and 175.2 Mw turbine output, CC5 Duct

Burners – each burner – 245 MMBtu/hr heat input

CC5 Oxidation Catalyst - Manufacturer to be determined

CC5 SCR - Manufacturer to be determined

CC4 turbine – 944.4 MMBtu/hr heat input and 80.3 Mw turbine output

CC4 Duct Burner – 40 MMBtu/hr heat input

CC4 Oxidation Catalyst Manufactured by Foster-Wheeler, # 3570

Auxiliary Boiler

Two Babcock & Wilcox "D" type FM10-66, 96.2 MMBtu/hr each, manufactured in 1974, capable of burning diesel or no.6 fuel oil.

Clayton boiler model EG304-1-LNB, 12.5 MMBtu/hr, burns natural gas, equipped with dry low-NOx burners.

Cooling towers:

Cooling Tower #4, Marley Cross Flow Model 576-46-4, S/N 576-12-646-76, 30,300 gpm with a cellular design drift eliminator, manufactured in 1972.

Cooling Tower #6, manufactured by Ecodyne Model 470-2-6710, 60,6000 gpm with a cellular design drift eliminator, manufactured in 1972.

CC5 Cooling Tower – 160,000 gpm capacity

PERMIT CONDITIONS
WEST PHOENIX POWER PLANT
PERMIT NUMBER V95-006
Minor Modifications 6-27-02-01 and 6-19-03-01
July 10, 2003 and Significant Revision S06-007
CC4 Cooling Tower – 40,000 gpm capacity

Gasoline Storage Tanks:

One 2000-gallon unleaded gasoline storage tank.

EQUIPMENT EXEMPT FROM OBTAINING THE PERMIT:

Fuel Oil Storage Tanks:

Five, 100K bbls each, fuel oil storage tank
One 55K bbls fuel oil storage tank.
One 4Kbbls fuel oil storage tank.
One 30K bbls fuel oil storage tank.
One 2000 gal. diesel storage tank (Used for storing vehicle fuel)

Solvent Cleaning Equipment:

Unheated, non-conveyorised, cleaning equipment with an open surface area of one square meter or less and an internal volume of 350 liters or less, having an organic solvent loss of three gallons or less.

Bioremediation Unit

Two bioventing systems, with no heat applied, designed for remediating diesel contaminated soil.

PERMIT CONDITIONS
WEST PHOENIX POWER PLANT
PERMIT NUMBER V95-006
Minor Modifications 6-27-02-01 and 6-19-03-01
July 10, 2003 and Significant Revision S06-007

APPENDIX B

PERMIT SHIELD APPLICABLE REQUIREMENTS

West Phoenix Power Plant

Permit Number V95-006

APPENDIX B: PERMIT SHIELD

Identified below are all federal, state and local air pollution control requirements applicable to the Permittee at the time the permit is issued. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance included in the Appendix B “Permit Shield” of this permit.

For each part, subpart, section, and subsection reference listed, all subsequent sections are assumed applicable. All other subparts or sections not listed are not applicable.

County Requirements Maricopa County Air Pollution Control Regulations

Regulation I General Provisions

Rule 100		General Provisions and Definitions (3/7/01 revision)
	§104	Circumvention
	§105	Right of Inspection of Premises
	§106	Right of Inspection of Records
	§ 301	Air Pollution Prohibited
	§ 501	Reporting Requirements
	§ 502	Data Reporting
	§ 503	Emission Statements Required as Stated in the Act
	§ 504	Retention of Records
	§ 505	Annual Emissions Inventory Report

Rule 130		Emergency Provisions (7/26/00 revision)
	§400	Administrative Requirements

Rule 140		Excess Emissions (7/26/00 revision)
	§400	Administrative Requirements
	§500	Monitoring and Records

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Regulation II Permits and Fee

Rule 200		Permit Requirements (5/20/98 revision)
	§ 301	Permits Required
	§ 302	Title V Permit
	§ 305	Earth Moving Permit
	§ 306	Permit to Burn
	§ 308	Application Standards
	§ 310	Prohibition – Permit Modification
	§ 311	Permit Posting Required
	§ 408	Testing procedure
	§ 409	Fees

Rule 210		Title V Permit Provisions (02/07/01 revision)
	§ 400	Administrative requirements
	§ 401	Fees
	§ 402	Permit Term
	§ 403	Source Changes Allowed without Permit Revisions
	§ 404	Administrative Permit Revisions
	§ 405	Minor Permit Revisions
	§ 406	Significant Permit Revisions
	§ 407	Permit Shields

Rule 240		Permits For New Major Sources And Major Modifications To Existing Major Sources
	§ 306.1	Offsets Plan
	§ 305	Requirements for non-attainment areas
	§ 308	Requirements for attainment areas

Rule 241		Permits for New Sources and Modifications to Existing Sources (6/19/96 revision)
	§ 301	Best Available Control Technology (BACT)

Rule 241	Permits for New Sources and Modifications to Existing Sources (6/19/96 revision)
	Requirements
§ 302	Reasonably Available Control Technology (RACT) Required

Rule 270	Performance Tests (11/15/93 revision)
§ 300	Standards
§ 301	Performance Tests Required (approved test methods)
§301.1	Applicable Procedures and Testing Methods
§ 301.2	Opacity determined by Reference Method 9 of the AZ Testing Manual
§ 400	Administrative requirements
§ 401	Performance Tests Required
§ 402	Testing Criteria
§ 403	Testing Conditions
§ 404	Notice of Testing
§ 405	Testing Facilities Provided
§ 406	Minimum Testing Required
§ 407	Compliance with the Emission Limits
§ 408	Additional Testing

Rule 280	Fees
§ 301.5	Standards

Regulation III Control of Air Contaminants

Rule 300	Visible Emissions (2/7/01 revision)
§ 301	Limitations – Opacity/General: Opacity \leq 20%
§ 302	Exceptions
§ 501	Compliance Determination – Opacity
§ 502	Compliance Determination – Opacity of Visible Emissions from Intermittent Sources

Rule 310		Open Fugitive Dust Sources (2/16/00 revision)
	§ 301	Opacity Limitation for Fugitive Dust Sources
	§302	Stabilization Requirements for Fugitive Dust Sources
	§ 303	Dust Control Plan Required
	§ 304	Elements of a Dust Control Plan
	§ 305	Dust Control Plan Revisions
	§ 306	Control Measures
	§ 308	Work Practices
	§ 401	Dust Control Plan Posting
	§ 501	Compliance Determination
	§ 502	Recordkeeping
	§ 503	Records Retention
	§ 504	Test Methods Adopted by Reference
	Table 1	Source Type and Control Measures
	Table 2	Source Type and Wind Event Control Measures

Rule 312		Abrasive Blasting (7/13/88 revision)
	§ 301	Limitations
	§ 302	Controls Required
	§ 501	Visible Emission Evaluation Techniques

Rule 314		Open Outdoor Fires (7/13/88 revision)
	§ 301	Prohibition – Open Outdoor Fires
	§ 302	Exemptions

Rule 315		Spray Coating Operations (11/17/99 revision)
	§ 301	Controls Required
	§ 302	Exemptions

Rule 320		Odors and Gaseous Air Contaminants (7/13/88 revision)
	§ 300	Standards
	§ 302	Material Containment Required
	§ 303	Stack height
	§ 304	Limitation – Hydrogen Sulfide
	§ 306.1	Steam Plants Using Low Sulfur Oil – After May 30, 1972
	§ 308	Limitation – Nitrogen Oxides from Electrical Power Plants

Rule 330		Volatile Organic Compounds (6/19/96 revision)
	§ 302	Limits/Non-Complying Solvents,
	§ 305	Equipment Cleanup
	§ 306	Containment and Disposal
	§ 307.2	Exemptions
	§ 502	Determination of Compliance
	§ 503.1	Recordkeeping and Reporting
	§ 503.2	Recordkeeping and Reporting
	§ 503.4	Recordkeeping and Reporting

Rule 331		Solvent Cleaning (4/7/99 revision)
	§ 301	Solvent Handling Requirements
	§ 302	Equipment Requirements for All Cleaning Machines
	§ 303	Operating Signage Requirements
	§ 304	Non-Vapor Cleaning/Degreasing
	§ 305	Non-Vapor Batch Cleaning Machines
	§ 306	Non-Vapor In-line Cleaning
	§ 307	Special Non-Vapor Cleaning Situations
	§ 501	Recordkeeping and Reporting
	§ 502	Compliance Determination and Test Methods

Rule 335		Architectural Coatings (7/13/88 revision)
	§ 301	Prohibition – Bituminous Pavement Sealers
	§ 302	Interim Limits Non-Flat Architectural Coatings
	§ 303	Final Limits – Non-Flat Architectural Coatings
	§ 304	Limits – Flat Architectural Coatings
	§ 305	Limits – Specialty Coating
	§ 306	Exemptions – Specific Use Coatings
	§ 307	Exemption – Small Containers
	§ 401	Labeling
	§ 402	Manufacture Date
	§ 500	Monitoring and Records

Rule 336		Surface Coating Operations (4/7/99 revision)
	§ 301	Surface Coatings
	§ 302	Application Methods for Surface Coatings
	§ 303	Cleanup of Application Equipment
	§ 304	Handling and Disposal of VOC
	§ 305	Exemptions
	§ 501	Recordkeeping and Reporting

Rule 340		Cutback and Emulsified Asphalt (9/21/92 revision)
	§ 301	Limitations
	§ 302.1	Exemptions
	§ 302.3	Exemptions
	§ 303	Labeling
	§ 501	Recordkeeping and Reporting
	§ 502	Compliance Determination and Test Methods

Rule 353		Gasoline in Stationary Dispensing Tanks (06/16/99 revision)
	§ 301	Standards – Vapor Loss Control Measures Required

Rule 353	Gasoline in Stationary Dispensing Tanks (06/16/99 revision)
§ 302	Fill Pipe Requirements
§ 303	Vapor Recovery System
§ 304	Equipment Maintenance and Use Required
§ 305	Exemptions
§ 502	Recordkeeping
§ 503	Compliance Determination
§ 504	Test Methods

Rule 360	New Source Performance Standards (3/1/00 revision)
§ 301	Adopted Federal Standards
§ 301	Subpart A – General Provisions
§ 301	Subpart Db – Standards of Performance for Electric Utility Steam Generating Units for Which Construction Commenced After September 18, 1978
§ 301	Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
§ 301	Subpart GG – Standard of Performance for Stationary Gas Turbines

Rule 370	Federal Hazardous Air Pollutant Program
§301.8	Asbestos NESHAP

Rule 371	Acid Rain (3/1/00 revision)
§ 301	Incorporated Subparts of the Federal Acid Rain Regulations

Rule 500	Attainment Area Classification
§ 300	Standards

PERMIT CONDITIONS
 WEST PHOENIX POWER PLANT
 PERMIT NUMBER V95-006
 Minor Modifications 6-27-02-01 and 6-19-03-01
 July 10, 2003 and Significant Revision S06-007

Rule 510	Air Quality Standards
§ 300	Standards

Regulation VI Emergency Episodes

Rule 600	Emergency Episodes (7/13/88 revision)
§ 302	Control Actions

Appendices

Appendix C	(2/16/00 revision)
Section 2	Test Methods for Stabilization
Section 3	Visual Determination of Opacity of Emissions from Sources for the Time-Averaged Regulations

State Requirements

Arizona Administrative Code

(Applicable in Maricopa County; ARS § 49-106)

R18-2-703.C.1 (R9-3-503.C.1) (Steam Generating Units over 73 MW)	For steam generating units having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour $E = 1.02Q^{0.769}$ where: Q = heat input in million BTU per hour.
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Applies only to Existing Unit K-2. Duct Burner K-7 is a New Source Performance Standard (NSPS) Unit and not subject to this AAC regulation (per the definition of “existing source”, R18-2-101.38).

R18-2-719.C.1 (R9-3-519.C.1) (Rotating Machinery)	For stationary rotating machinery having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour $E = 1.02Q^{0.769}$ where: Q = heat input in million BTU per hour.
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Applies only to the Diesel Fire Pump Engines, Existing Units K-4, K-5, and K-6. Gas Turbine K-7 is a New Source Performance Standard (NSPS) Unit and not subject to this AAC regulation (per the definition of “existing source”, R18-2-101.38).

R18-2-724.C.1 (R9-3-524.C.1) (Steam Generating Units less than 73 MW)	For steam generating units having a heat input rate of 4200 million BTU per hour or less, the maximum allowable particulate emissions rate in pounds-mass per hour $E = 1.02Q^{0.769}$ where: Q = heat input in million BTU per hour.
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Applies only to Existing Unit K-1.

Federal Requirements

New Source Performance Standards General Provisions

(40 CFR Part 60 Subpart A)

§ 60.4(a), (b), (D)	Address
§ 60.7(a), (b), (c), (d), (f)	Notification and Recordkeeping
§ 60.8	Performance Tests
§ 60.12	Circumvention
§ 60.13	Monitoring
§ 60.19	General Notification and Reporting Requirements

New Source Performance Standards – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (40 CFR Part 60 Subpart Db)

§ 60.44b(l)(1)	Standard for Nitrogen Oxides
§ 60.46b(c), (f)	Compliance and Performance Test Methods and Procedures for Particulate Matter and Nitrogen Oxides
§ 60.47(a)	Emission Monitoring
§ 60.48b, (b), (c), (d), (e), (f)	Emission Monitoring for Particulate Matter and Nitrogen Oxides
§ 60.49b(a), (b), (d), (g), (h)(2), (i)	Reporting and Recordkeeping Requirements

New Source Performance Standards – Standards of Performance for Stationary Gas Turbines (40 CFR Part 60 Subpart GG)

§ 60.332(a) and (b)	Standard for Nitrogen Oxides
§ 60.333	Standard for Sulfur Dioxide
§ 60.334(b)	Monitoring of Operations
§ 60.335	Test Methods and Procedures

NESHAP Program (40 CFR Part 61)

Subpart M	National Emission Standard for Asbestos
§ 61.145(a)(2)	Standard for demolition and renovation

§ 61.145(b)(1), (2), (3)(i) and (3)(iv), (4)(i) through (vii) and (4)(ix) and (4)(xvi)	Notification requirements when demolition involves less than 80 linear meters on pipes and less than 15 square meters on other services and less than one cubic meter off facility components of regulated asbestos containing material (RACM) where the length or area could not be measured previously or there is no asbestos.
§ 63.4(b)	Circumvention

Accidental Release Program (40 CFR Part 68)

§ 112(r)(1)	General duty to identify, prevent and minimize the consequences of accidental releases of listed and other extremely hazardous substances.
Part 68	Chemical Accident Prevention Provisions

Permits Regulation (40 CFR Part 72)

Subpart A provisions	Acid Rain Program General Provisions
72.9(a), (b), (c), (d), (f), (g)4	Standard Requirements
Subpart B	Designated Representative
72.20	Authorizations and Responsibilities of the Designated Representative
72.21	Submissions
72.22	Alternate Designated Representative
72.23	Changing the Designated Representative
Subpart C	Acid Rain Permit Applications
72.30(a), (b)(2)(ii), (d)	Requirements to Apply
Subpart D	Acid Rain Compliance Plan and Compliance Options
72.40(a)(1)	General, Compliance Plan with sulfur dioxide emissions
Subpart I	Compliance Certification
72.90	Annual Compliance Certification Report
72.95	Allowance Deduction Formula
Appendix A	Methodology for Annualization of Emissions Limits

Appendix B	Methodology for Conversion of Emissions Limits
Appendix D	Calculation of Potential Electric Output Capacity

Sulfur Dioxide Allowance System (40 CFR Part 73)

Subpart B	Allowance Allocations
73.33(a), (c)	Authorized Account Representative
Subpart D	Allowance Transfer
73.50(b)	Scope and Submission of Transfers

Continuous Emission Monitoring (40 CFR Part 75)

Subpart A	General
75.4(b)(2),(c)(2),(i)(2)	Compliance Dates
Subpart B	Monitoring Provisions
75.10	General Operating Requirements
75.11(d)(2)	Specific Provisions for Monitoring SO₂ Emissions
75.12(a),(b),(c)	Specific Provisions for Monitoring NO_x Emissions
75.13(b)	Specific Provisions for Monitoring CO₂ Emissions
75.16(b),(e)	Special Provisions for Monitoring Emissions from Common, Bypass, and Multiple Stacks for SO₂ Emissions and Heat Input Determinations
Subpart C	Operation and Maintenance Requirements
75.20	Certification and Recertification Procedures
75.21	Quality Assurance and Quality Control Requirements
75.22	Reference Test Methods
75.24	Out-of-Control Periods and Adjustments for System Bias
Subpart D	Missing Data Substitution Procedures
75.30	General Provisions
75.31	Initial Missing Data Procedures
75.32	Determination of Monitor Data Availability for Standard missing Data Procedures
75.33	Standard Missing Data Procedures for SO₂, NO_x, and Flow Rate

75.34	Units with Add-on Emission Controls
75.35	Missing Data Procedures for CO₂ Data
75.36	Missing Data Procedures for Heat Input Determinations
Subpart E	Alternative Monitoring Systems
75.40	General Demonstration Requirements
75.41	Precision Criteria
75.42	Reliability Criteria
75.43	Accessibility Criteria
75.44	Timeliness Criteria
75.45	Daily Quality Assurance Criteria
75.46	Missing Data Substitution Criteria
75.47	Criteria for a Class of Affected Units
75.48	Petition for an Alternate Monitoring System
Subpart F	Recordkeeping Requirements
75.53(a), (b), (f)(1), (f)(4), (f)(6)	Monitoring Plan
75.57	General Recordkeeping Provisions
75.58(b), (c)	General Recordkeeping Provisions for Specific Situations
75.59	Certification, Quality Assurance, and Quality Control Record Provisions
Subpart G	Reporting Requirements
75.60	General Provisions
75.61	Notifications
75.62	Monitoring Plan Submittals
75.63	Initial Certification or Recertification Application Submittals
75.64	Quarterly Reports
Subpart H	NO _x Mass Emissions Provisions
Appendix A	Specifications and Test Procedures
Appendix B	Quality Assurance and Quality Control Procedures
Appendix F	Conversion Procedures

Appendix D	Optional SO ₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units
Appendix G	Determination of CO ₂ Procedures

Protection of Stratospheric Ozone (40 CFR Part 82)

Subpart F	Recycling and Emissions Reduction
§ 82.106 - 82.124	Labeling Requirements
§ 82.156	Required Practices
§ 82.158	Standards
§ 82.161	Technician Certification
§ 82.166	Reporting and Recordkeeping

Subpart G	Significant New Alternatives Policy Program
§ 82.174(b)	Prohibition against use of substitute
§ 82.174(c)	Prohibition against use of substitute without adhering to use restrictions
§ 82.174(d)	Prohibition against use of substitute after added to list of unacceptable substitutes

Federal Requirements

Maricopa County State Implementation Plan (as of 12/31/99)

Regulation I General Provisions

Rule 3 Air Pollution Prohibited

Regulation II Permits

Regulation II Permits
Rule 22 – Permit Denial – Action – Transfer – Posting – Revocation – Compliance
§F – Permit Posting
Rule 27 - Performance Tests

Regulation III Control of Air Contaminants

Rule 30 - Visible Emissions
Rule 31 - Emissions of Particulate Matter
§§ A.1,2,3,4,6,7, - Non-Point Sources of Particulate Matter.
§ H.1.a - Fuel Burning
Rule 32 - Odors and Gaseous Emissions
§§ A, C, E, F
Rule 33 – Storage and Handling of Petroleum Products
§ 33.3 Loading Into Stationary Storage Containers
Rule 34 – Organic Solvents – Volatile Organic Compounds
§ C.1 – Metal cleaning operations
§ C.2(a) – Cold Organic Solvent Cleaning
§ E.1 & E.2 – Spray Paint and Other Surface Coating Operations
§ G – Limits on VOC Discharge from Individual Equipment
§ K – Limits on Photochemically Reactive Solvent

§ L – Cutback Asphalt
Rule 34 – Organic Solvents – Volatile Organic Compounds
§ C.1 – Metal cleaning operations
§ K – Limits on Photochemically Reactive Solvent
Rule 335 – Architectural Coatings
Rule 336 – Surface Coating Operations
Rule 353 – Surface Coating Operations
Rule 340 – Cutback and Emulsified Asphalt
§§ 301, 501

Rule IV Production of Records: Monitoring, Testing and Sampling Facilities

Rule 40 Recordkeeping and Reporting
Rule 41 Monitoring
§ A
Rule 42 Testing and Sampling
Rule 43 Right of Inspection

Regulation VII Ambient Air Quality Standards

Rule 72 Emergency Episode Criteria
§72e Air Pollution Alert Actions
§72f Air Pollution Warning Actions
§72g Air Pollution Emergency Actions

Technical Summary
Minor Modification 6-19-03-01
West Phoenix Power Plant Title V Permit V95-006

I. APPLICANT

Arizona Public Service Company
PO Box 53933, Mail Station 4120
Phoenix, AZ 85072-3933

II. PROJECT LOCATION

The West Phoenix Power Plant is located at 4606 W Hadley, Phoenix, AZ, which lies within Maricopa County. The Section/Township/Range of the site are Section 9/Township 1N/ Range 2E. The plant is operated by the Arizona Public Service Company (APS). The plant base elevation is approximately 1,050 feet above mean sea level.

III. FACILITY DESCRIPTION

The West Phoenix Power Plant has been in operation since 1930. The emission units at the facility consist of two 55 MW simple cycle combustion turbines (CT1&2), three 85 MW combined cycle units (CC1-3), one 130 MW combined cycle unit (CC4), one 530 MW combined cycle unit (CC5) (currently under construction), a 48.1 mmBtu/hr auxilliary boiler, three steam generating units, and supporting cooling towers.

A significant modification (S99-023) was issued on 06/30/00, and involved installation of new units CC4 and CC5, and installation of an SCR NOx control system on unit CC3. This significant modification has been incorporated into the Title V permit.

Most power generating units at the West Phoenix facility use only natural gas, however CC3 has the capability to burn diesel fuel oil. The permit conditions specify that fuel oil is only to be burned in emergency situations, and even in such situations the annual fuel oil limit is 500,000 gallons.

IV. MINOR MODIFICATION DESCRIPTION

The purpose of the minor modification is to add an auxiliary boiler, which was previously being used temporarily, as permanent equipment to this facility. This boiler is necessary for processing wastewater during periods when the CC5 unit is not operating.

Emissions from this boiler will be quantified and accounted for under the total annual emissions limit for units CC3, CC4 and CC5. These emissions have been accounted for in the netting analysis that was performed for this facility's expansion project permit (Significant

Modification S99-023. The NO_x potential to emit is less than 1 tpy, and no independent netting analysis is required pursuant to Rule 210 §307.2.

Voluntary emission limits for the boiler have been established at 13 ppmvd NO_x and 50 ppmvd CO per manufacturer guarantee. To monitor for compliance, the Permittee is required to conduct opacity monitoring and annual tune-ups. Records of such tune-ups as well as fuel usage, hours of operation and emission calculations are required.

This minor modification also included a request by the Permittee to revise the required PM₁₀ Testing Methods to allow for flexibility. The permit currently requires to test using EPA Method 5, and if requested by the Control Officer, EPA Method 202. The Permittee requests that additional options be listed. The permit has been revised to add Method 201A as an alternative and to give the Permittee the flexibility to use other EPA Methods if approved by the Control Officer.